The American Artisan
And Hardware Record

Vol. 55. No. 14. CHICAGO, APRIL 4, 1908. $2.00 Per Year.

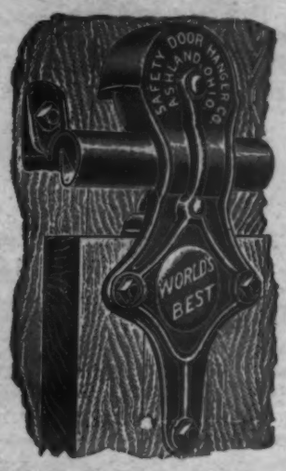
All Kinds of
BOLTS, RIVETS, NUTS, WASHERS, CARRIAGE FORGINGS, ETC.
Send for 1908 Catalog "E" Prices on Application
COLUMBUS BOLT WORKS
COLUMBUS, OHIO

IN THE FRONT RANK FOR 25 YEARS
"AMERICAN SEAL"
ELASTIC OIL ROOFING CEMENT
STOVE PUTTY and ASBESTOS
FURNACE CEMENT
and the superior quality of these goods is still universally recognized.
THE WM. CONNORS PAINT MFG. COMPANY
MAKERS
TROY, N. Y.
Western Agent
FRIEDLEY-VOSHARDT CO.
194-204 Mather Street, Chicago, Ill.
Southwestern Agent
STOCKHOFF SUPPLY COMPANY
107 N. Main St., St. Louis, Mo.

TRYING to do business without advertising is like winking at a girl in the dark; you know what you are doing but nobody else does.

The Hardware Merchant who sells good goods
SELLS ORIGINAL
MATCHLESS
Floor Hinge, Jamb Hinges, and Hardware Specialties.
If your Jobber cannot furnish them, write us.
LAWSON MFG. CO
49 Dearborn St., Chicago, Ill.

NEW DESIGN WORLD'S BEST
TUBULAR TRACK DOOR HANGER



We have increased the diameter of the wheel to 2¼ in., making it the easiest running Hanger on the market.
The supplementary wheel prevents derailment. Frame is made of best grade malleable iron. Finished in Aluminum and each pair packed in an individual box, complete with bolts. The track brackets are slidable and may be placed at any point desired. We do not sell catalog houses. Write for prices.
SAFETY DOOR HANGER CO.
Manufacturers
Ashland, Ohio Hamilton, Ont., Can.

"NEVER-BREAK"
TRADE MARK

Catalog Free
"NEVER-BREAK"
Steel Spiders, Griddles & Kettles
WILL NOT
Scale Off like cheap enamel
WILL NOT
Scorch or Burn like light fry-pans and skillets.
WILL NOT
Absorb Grease or Flavors like cast iron.
THE AVERY STAMPING CO.
CLEVELAND, OHIO
Sole Manufacturers
"NEVER-BREAK" Goods.

DELTA
FILES OF QUALITY
CARVER FILE CO., Philadelphia, Pa.
An independent organization not connected with the trust in any form, shape or manner.
TRADE MARK DELTA
FILES

$750.00 FREE!

$500.00 in Cash
$250.00 in Premiums
First Prize $100.00
Send for particulars.
Pullman Mfg. Company
Sophia Street, ROCHESTER, N. Y., U. S. A.

If you want a Hone that is perfect in every way

we have it. "Apart" Hones contain no veins or irregular formations and will give complete satisfaction.
For sale by all jobbers
S. R. DROESCHER
79 Warren St., New York, N. Y.

Another Pittsburgh Sensation

Made under distinct designs as
True Tremont and Mildred Good Luck.

Here is a Four-hole Cook Stove with a cooking top as large as a six-hole range, and there is "Stove" under all of it.

The Garnet Cinderella

18 and 20-inch square ovens.

Extra Large Firebox — Basket or Duplex Grate—Sectional Cast Liners, locked in position.

Cannot be displaced by stoking fire.

Direct Delivery Pouch Feed—The coal falls onto fire.

LARGE FLUES
A sure worker

ROOMY ASH PIT
Clean and convenient

HEAVY CASTINGS
Important feature

We are making a price on this stove. You are not thoroughly posted on the "doings" in the cook stove line until you have seen this stove and heard the price.

Stove & Range Co. of Pittsburgh

PITTSBURGH, PA.

The KELSEY "Zig-Zag" Flues

In the KELSEY, the fresh air is warmed in a much different and far more effective manner than is possible in any other warm air heating apparatus.

The fire itself is entirely surrounded by, and the combustion chamber is formed by cast-iron flues.

The sides of these flues are cast with deep corrugations,—so that the air, in passing up through them, is deflected from one side to the other,—in that way being evenly and uniformly heated when emerging at the top and before entering the warm air pipes.

If there is any fire in the KELSEY at all, the air can not pass up through these flues without being heated.

The hotter the fire, the more rapidly the air passes through these tubes.

In the KELSEY the air is never "scorched" nor vitiated.

This is not mere theory. It has been demonstrated over and over again,—in over 32,000 KELSEY Generators!

If you want an apparatus with good, sound talking points,—**let us explain to you our Exclusive Agency Proposition!**

KELSEY HEATING COMPANY

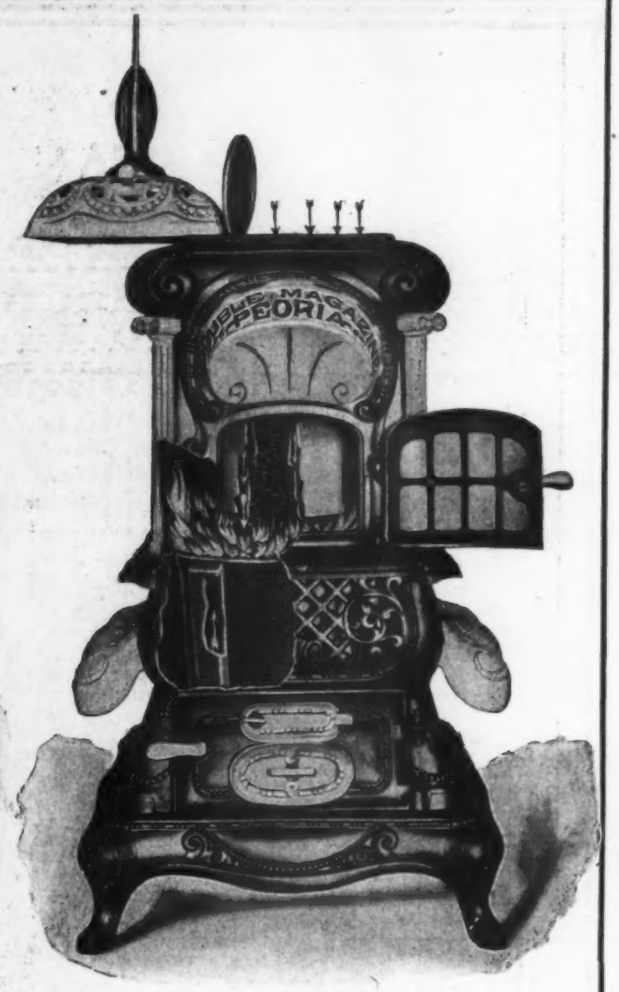
SYRACUSE, N. Y.

New York: 156 Fifth Ave. **Chicago: Van Evera & Lewis Mfg. Co., 104-106 W. Lake St.**

James Smart Mfg. Co., Brockville, Ont., Sole Makers for Canada

DOUBLE MAGAZINE PEORIA

A new and original design—not a heater like it on the market. Notice the Colonial style, square, substantial and beautiful, decorated with plain but artistic beading. This is a 16 inch, doesn't it look like an eighteen? Did you notice the urn? Decidedly Colonial and our own make.



SECTIONAL VIEW

Sectional view—showing the automatic cover, double magazine (forming a down draft) to keep the fuel cool to avoid coking or burning up in the magazine (the secret of automatic soft coal feed) and our original C. & P. "Perfect Circulation" fire pot with air ducts.

THE DOUBLE MAGAZINE PEORIA

Something different and new

C. & P. PERFECT CIRCULATION FIRE POT

The C. & P. "Perfect Circulation" fire pot—see the cored air ducts that complete circulation and draw all gases from the ash pit back on to the fire bed through openings near the top of the pot, inside, where they ignite and increase the heat units nearly fifty per cent.

THE DEALER that secures the agency for the Double Magazine Peoria is the dealer that does not turn his back on opportunity. Why? Because it **is** an opportunity to place upon your floors a magazine heater that will burn slack (the 75-cents-a-ton kind) just as easily and steadily as a gas jet burns gas. To claim this is enough to attract your attention—but we want to do more than claim it; we want to **prove** it to you. The Double Magazine Peoria is the solution of that never-before-answered question: "Why can't a magazine stove be made that will burn slack just as well as a base burner burns hard coal?" **This** and **more** is what the Double Magazine Peoria will do. By the combined efforts of the double magazine and the C. & P. "Perfect Circulation" fire pot (see cuts) slack, soft coal, coke, lignite or hard coal will burn steadily and evenly and will produce more heat than any other magazine stove made—a **broad** assertion but a **true** one.

And another thing—a customer can't "go around the corner" and get the same stove for a dollar less, because the man "around the corner" won't have this stove if you write first. And he can't get it, or anything like it from any other manufacturer, because we have it **patented throughout.** The stove will sell on sight and the sale **must** come to you—see the point.

Full descriptive matter, agency proposition and territory will be given upon application.

The Culter & Proctor Stove Co.

PEORIA, ILLINOIS

A Wireless Message From "The Monitor"

WOULD YOU HAVE THE PRESENT YEAR BRING YOU

INCREASED PATRONAGE, PROFITS AND PROSPERITY

DO YOU REALIZE THAT THE PEOPLE ARE DEMANDING BETTER RESULTS FROM HARD COAL BASE BURNERS?

THE MONITOR FRONT FLUE RADIATOR

WILL DO ALL OF THE ABOVE FOR YOU AND YOUR CUSTOMERS.
A CATALOG AND FULL INFORMATION WITH PRICES FOR THE ASKING

THE MONITOR STOVE & RANGE COMPANY

CINCINNATI

And

MORLEY BROS., Distributors for the State of Michigan.
GREAT WESTERN STOVE & REPAIR CO., Minneapolis, Minn., Northwestern Distributors.
THE MORLEY-MURPHY HARDWARE CO., Green Bay, Wis., Distributors for Wisconsin.
HIBBS & FLEMING, Los Angeles, Cal., Distributors for California.

Our Strictly New Furnace

Built to the Hour

A Powerful Perfect Worker

OUR NEW ONE

WHATEVER IS GOOD, NEW AND MODERN IN FURNACE MAKING HAS BEEN CONSIDERED IN THE PLANNING AND BUILDING OF THIS FURNACE. * HEAVY STEEL PLATE IS DESIRABLE FOR QUICK HEATING WE HAVE IT IN THE LARGE RETURN RADIATOR. * HEAVY CAST IRON IS DESIRABLE FOR DURABILITY IN FIRE SECTION, WE HAVE IT THERE. * LARGE DOORS ARE DESIRABLE, WE HAVE MADE THEM LARGE. * PROMPT RELIABLE ACTION IS ESSENTIAL, THEY ARE HERE CORRECTLY AFFORDED.

THERE IS NO MORE SATISFACTORY FURNACE THAN THIS. THEY MAY TIE IT BUT THEY CAN'T BEAT IT. HEAVY STEEL HIGH RETURN RADIATOR WITH CAST TOP AND BOTTOM. ASBESTOS PACKED JOINTS EVERYWHERE. BIG FIRE-POT, BIG ASH-PIT, BIG CLEAN-OUT, BIG DOORS GROUND TO PERFECT FITTING. HEAVY SEPARATE GRATE BARS. DUST TIGHT. GAS TIGHT. A VERY COMPLETE MODERN FURNACE THAT WILL SATISFY BOTH YOU AND YOUR CUSTOMERS.

WALTER S. RAIT & CO.

211-213 Lake Street, CHICAGO, ILLINOIS.

A Strong Selling Combination

When you consider the quality of materials we use and the quality of finish we produce in the manufacture of

Champion Steel Ranges

You will readily see what a strong selling combination we offer you. By selling the *Champion Steel Range*

You Can Successfully

overcome the cut-price, cut-quality kinds of competition and make a good profit too. Your interest in our catalog is sure to be of money making benefit to you. Send for it.

Champion Steel Range Co.,

CLEVELAND, OHIO.

MODEL HUB RANGE—EBONY FINISH.

HUB RANGES

Make an idea line for the dealer to handle; just the line to stir up the spring trade with.

HANDLE HUB RANGES

and see your Spring trade grow

Here are some of the styles:

Monarch HUB, Ebony Fnish with closet base.
Model HUB, Ebony Finish—see cut.
Rex HUB, Ebony Finish.
Magic HUB, Ebony Finish.

Let us send you our special 18-page folder of HUB Ranges and Heaters.

SMITH & ANTHONY CO., Makers,

52-54 Union Street, BOSTON, MASS.

Monarch Air Blast

All the advantages of our famous MONARCH plus the air blast. This is a sectional upper fire pot constructed so that oxygen is fed into and above the fuel burning the gases, assuring economy, cleanliness. It is the most practical soft coal furnace offered the trade.

Forest City Foundry & Mfg. Co.

CLEVELAND, OHIO

Mfrs. The Imperial, Niagara and Combination Furnaces, Registers, Mail Boxes, Hitching and Sash Weights, Etc. Write for our new Catalog.

Shaded Sectional Cut

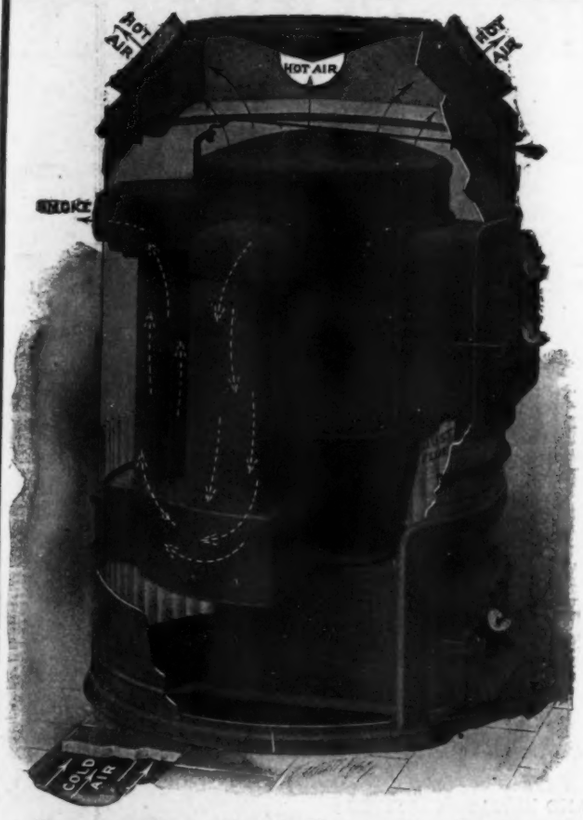
of the

"Low Down" Crown Warm Air Furnace

Designed to show the direction taken by the gases and warm air. Also the thickness and staunchness of its parts.

March-Brownback Stove Co.

POTTSTOWN, PA.



New Steel Dome Double Return Flue Furnace

BOYNTON'S

New Steel Dome Double Return Flue Furnace

for burning coal and wood is the Best and latest type of wrought plate furnace on the market.

Like all Boynton Furnaces the **Steel Dome Return Flue Furnace,** maintains the general excellence, modern design and absence of complications which have made **The Boynton** the best and most complete line of furnaces made.

Fitted with Boynton's Patented Square Fire Pot and Square Ash Pit.

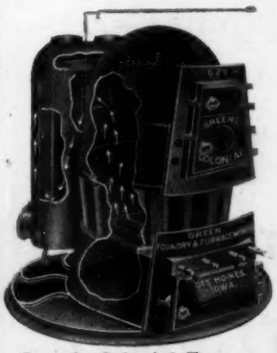
The smoke pipe damper is both direct and indirect and adjusted by a rod passing over the top of the furnace. Boynton's new patent regulating ventilator furnished with each furnace.

The Boynton Furnace Co.

147 Lake St. **CHICAGO**
207-209 Water St. **NEW YORK**

TASTES DIFFER IN FURNACES

As in Everything Else.

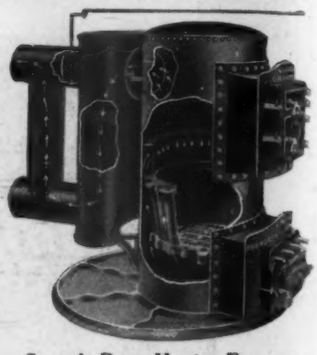


Green's Colonial Furnace.

One style of furnace will not please all of your customers. One man wants a steel furnace, another a cast iron furnace. Can you now supply the demands of all your customers? Why not handle a complete line—high priced furnaces and low priced furnaces; all cast furnaces, all steel furnaces, and furnaces part cast and part steel; furnaces for soft coal, furnaces for hard coal, and furnaces for wood; furnaces with every modern improvement and convenience? We manufacture

GREEN'S Colonial Furnace
GREEN'S Base Heater Furnace
GREEN'S Low Down Furnace
GREEN'S Steel Plate Furnace
GREEN'S Crescent Furnace
GREEN'S Hawkeye Furnace
GREEN'S Wood Furnace
GREEN'S Steel Dome Furnace

We have a line which will interest you. Our location insures a low freight rate. Our class of workmen insures a high grade article. Our stock of goods insures prompt shipment.



Green's Base Heater Furnace.

Green's Low Down Furnace.

Green's Hawkeye Furnace.

Write for Catalogue and Discounts.

GREEN FOUNDRY & FURNACE WORKS, DEPT. "A" Des Moines, Ia.

XXth CENTURY FURNACE

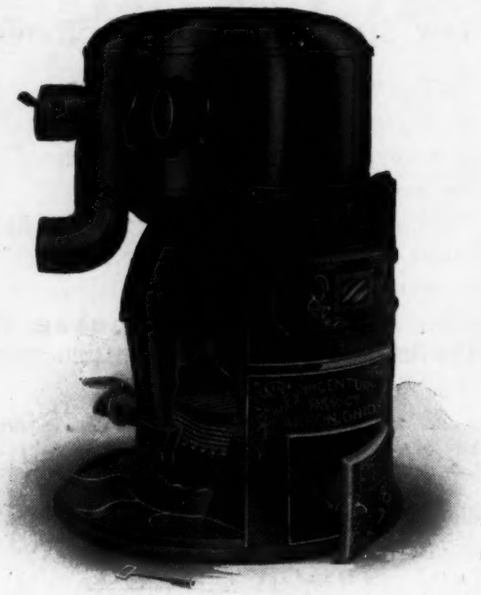


Plate Body Radiator

There is no better soft coal furnace than this. It is a quick and reliable worker. It is simple, durable and efficient. The lower sections are in heavy durable cast iron. The large corrugated dome is a heavy plate closely riveted. The cap is of cast iron. The dome section is self cleaning. The soot drops away from it and adds to the fuel, making it absolutely self cleaning. The heat produced is all utilized by radiation from the shell, the dome and the radiating pipes.

Burns soft coal, lignite or wood perfectly and has the best known draw and shaking grate that lifts out bodily and the XXth Century slotted fire pot provides perfect combustion for the fuel. **Strong, Durable** and economical. There is nothing about it to get out of order.

Features: heavy castings, large feed door, large ash-pit, large combustion chamber, high quick heating radiator, perfect regulation, unusual amount of radiating surface, self cleaning, simple, durable, perfect and the best front damper regulating arrangement. Gas tight, dust tight.

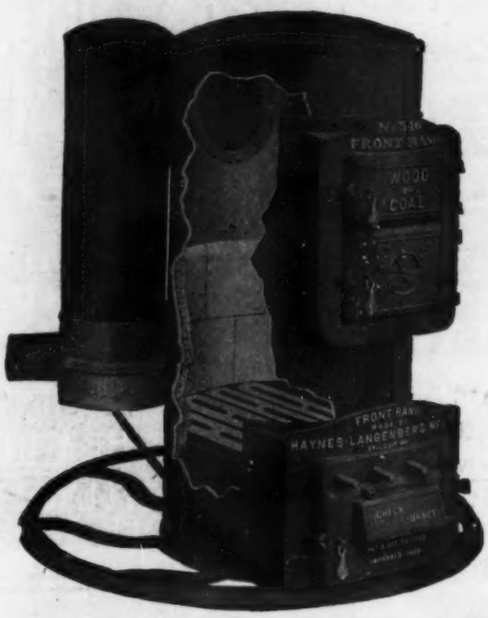
The Furnace that Works and Satisfies.
Get Our Catalogue.

XXth CENTURY HEATING AND VENTILATING COMPANY
AKRON, OHIO.

BRANCH HOUSES AND REPRESENTATIVES:

G. W. MOULTON, Kansas City, Mo. O. F. MORROW, Minneapolis, Minn. J. H. CUNDIFF, Peoria, Ill.
E. L. JAYNES, Chicago, Ill. GUS DOLAN, Rochester, N. Y.

For Economy
For Durability
For Lasting Results



INSTALL THE

FRONT RANK STEEL FURNACE

Built Like A Boiler.
Absolutely Gas and Smoke Proof.
Over 10,000 in Use in Our Home City
ST. LOUIS
Thousands Elsewhere.

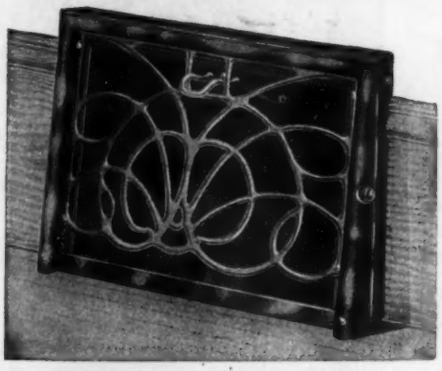
We want agents everywhere. Write for our attractive Proposition, Catalog and Terms. Write us today.

Sales Agents for Wisconsin and Northern Peninsula of Michigan
CORDES HEATING & SUPPLY COMPANY, MILWAUKEE, WIS.

HAYNES-LANGENBERG MFG. CO.

4045-4047 Forest Park Boul., ST. LOUIS, MO.

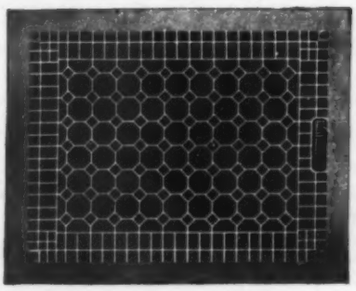
SEMI STEEL FLOOR REGISTERS



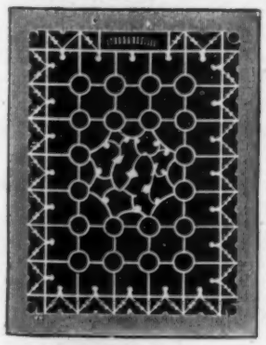
in all sizes and finishes. Neat in design, Strong, Light in Weight.

Mueller Wall Registers

both steel and cast, in various sizes and finishes, and with the most simple and durable operation. No parts to get out of order.



L. J. Mueller Furnace Co. Established 1857 **191 Reed St., Milwaukee, Wis.**



REGISTERS

NOT IN THE ASSOCIATION. OUR DISCOUNT 80 and 5%.

MAKERS OF ALL CAST WARM AIR REGISTERS, neat in design, and superior in finish, interchangeable with all first-class makes, and will wear a life-time.
Why buy the so-called Semi-Steel or Stamped Register? They are only imitations.
We are the largest makers of registers in the country. Our own foundry with molding capacity of 200 molders.
Get the Association's discount and compare it with ours. You will see how much we can save you.
We carry a large stock insuring prompt shipment.

STANDARD REGISTER COMPANY
Register Dept., Standard Foundry & Mfg. Co., CLEVELAND, OHIO

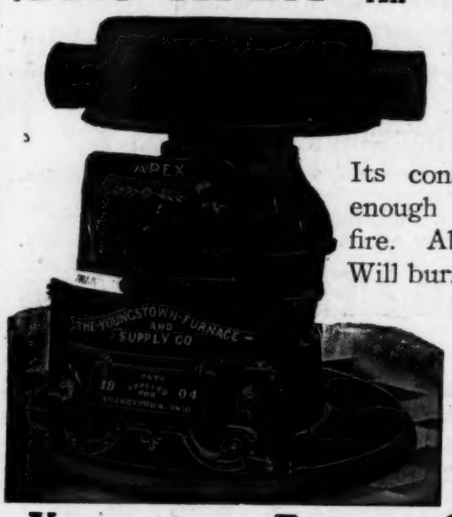
Write for Circulars and Terms

The Ideal Epworth Acetylene Generators

Are Ideal in construction, Ideal in light producing power Ideal in giving out steady light, Ideal in selling qualities Ideal in lighting Dwellings, Stores, Hotels, Churches and Towns. Acetylene light is the safest, best, cheapest, brightest, finest light in the world, when produced in the Ideal Epworth Generators. Satisfaction guaranteed. Agents wanted.

IDEAL EPWORTH ACETYLENE CO., (Successors to Epworth Gas, Light & Heating Co., Waterloo, Iowa.)
JOHNSTON, PA. WATERLOO, IOWA

The APEX Warm Air Furnace



is an extra heavy, durable furnace with a most powerful heating capacity. Its construction is strong enough to resist the fiercest fire. Absolutely gas tight. Will burn hard coal, soft coal or coke. Simple to to operate, economical and thoroughly efficient.

Write Today for Catalogue

Youngstown Furnace & Supply Co.

Chicago Office, 211-213 Lake St. Youngstown, Ohio

Rood & McIntyre, Kansas City, Mo., Southwestern Distributors

Economy, Cleanliness and Durability All Combined in the

Moncrief

Warm Air Furnace

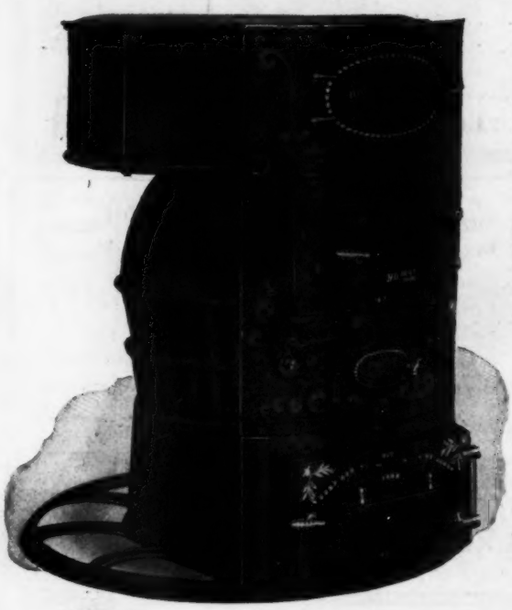
A few of the many good points of the MONCRIEF
- All Cast Iron
- Moncrief Duplex Grate
- Large Radiating Surface
- Top Return Flue
- Double Fire Pot
- Large Grate Surface

HENRY & SCHEIBLE CO.

825-29 Long Avenue, N. W.
CLEVELAND, O.

Western Sales Agent
J. C. KIMMEL, 3314 E. 18th St.
Kansas City, Mo.

One Quality—THE BEST



The practical improvements embodied in our furnaces have made ours the foremost line on the market.

For simplicity of Construction, Durability and Power they are without an equal.

Made in every style, for every fuel, and of the Very Best materials.

Write to-day for printed matter and prices of our complete line.

Walter S. Rait & Co.
211-213 Lake Street
Chicago, Ill.

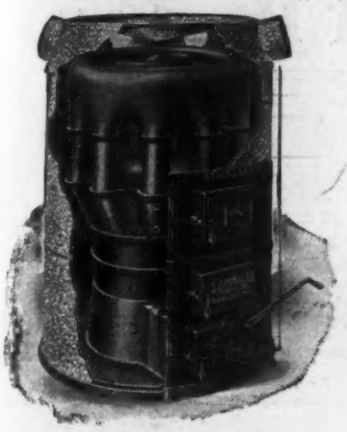
YOU

need a Tinner, Furnace Man or Hardware Clerk. A want ad in

THE AMERICAN ARTISAN

That's all that's necessary to solve the problem.

BE AN EDUCATOR



When figuring heating work, educate your customers to thet fact hat the Best is None Too Good for him, and in the end is the Cheapest.

THEN GIVE HIM THE BEST

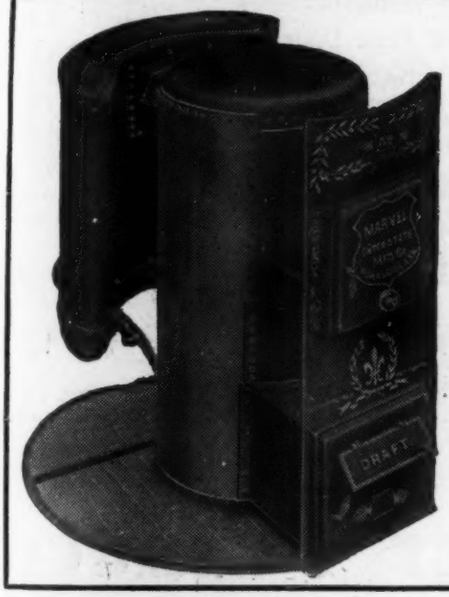
For many reasons, too numerous to mention here, the "MUELLER" All Cast, Double Radiator Furnace is the BEST. It is the most powerful and economical, and will last a lifetime.

Our catalog tells all about the full line of "MUELLER" Furnaces—ask for a copy if you have none.

We also make a complete line of Cast ron House Heating Boilers.

L. J. Mueller Furnace Company

Established 1857 **191 Reed Street, MILWAUKEE, WIS.**



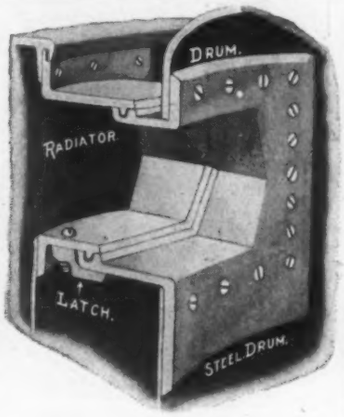
MARVEL HEAT PRODUCERS

BETTER FURNACES

Hot Blast Over and Thru Fire Saves Fuel. Strongest Grate Ever Made.

Fewer Joints and Parts. Many Exclusive Features of Merit.

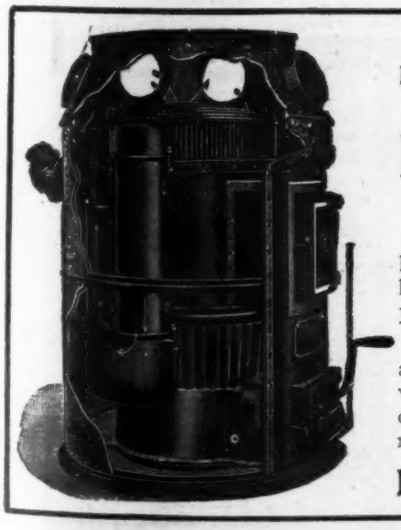
Catalog for the asking. It shows all points.



Only gas tight joint made on the job.

INTERSTATE MANUFACTURING COMPANY

OSKALOOSA, IOWA



ANY SIZE ANY STYLE

But Only One Quality—THE BEST

THAT IS WHY THE

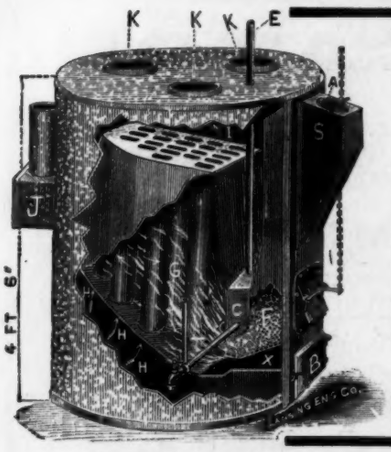
FLORAL CITY FURNACES

have occupied the proud position of leaders in furnace construction for years.

For **durability, economy, power** and **satisfactory service,** this line is without an equal, and as long as quality is considered, it is sure to retain its place at the head.

Write For Our Latest Catalogue.

MONROE FOUNDRY & FURNACE CO., MONROE, MICHIGAN.



The Garner Smokeless Soft Coal Heater

burns soft coal without soot. No smoke nor gas in the house, nor soot in the chimney. The most powerful and economical furnace known. Operates on scientific principles. Made in 3 sizes. Heats with hot air only, or in combination with hot water. Will heat more air with less expense than any other heating device on the market. A magazine feed that gives the steadiest heat. The first one ordered by any responsible dealer may be returned to us in 30 days, if not as represented.

Write for Circulars and Prices. Agents Wanted Everywhere.

THE GARNER HEATING CO., Lansing, Mich.

The Hero Furnace

For any kind of Fuel

Showing Smith's Cleanable Water Heater

Cast or Steel Radiator.
Large Double Feed Doors.
Independent Grate Bars.
Everything an up-to-date furnace should have.
Catalog tells all about it, also about our

New Hero Boilers

CHAS. SMITH COMPANY

101 East Lake Street, CHICAGO, ILL.

Gilt Edge Badger Furnace

With Steel Plate Radiator

Designed to meet the wants of those desiring a furnace for burning hard coal exclusively.

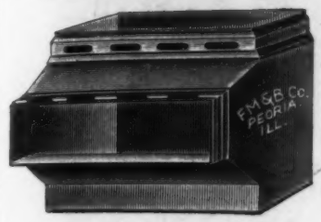
Combines all the features necessary to make it a most convenient, effectual and economical heater of high grade.

A Good Seller and a satisfactory producer. Made in four numbers.

R. J. SCHWAB & SONS CO., Milwaukee, Wis.

Catalogues on Application

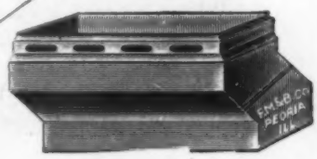
Save Time—Save Labor

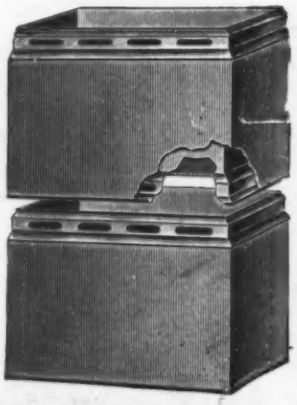


You can do both by installing Improved Handy Furnace Pipe. The usual loss of time and patience is entirely obviated by the use of this pipe. It can be practically thrown together *because* the one end is $\frac{5}{8}$" larger than the other and *because* the slip is $1\frac{3}{8}$" long.

THE IMPROVED **HANDY** FURNACE PIPE

The Improved Handy Furnace Pipe has the most **perfect fitting joints** of any pipe made. When you install this pipe you can guarantee **perfect ventilation.**





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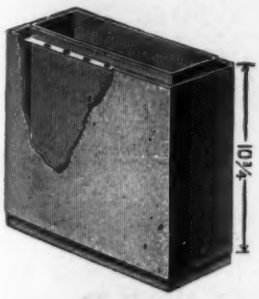
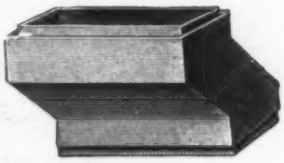
PEORIA, ILL.



The MICHIGAN SAFETY FURNACE PIPE COMPANY



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DETROIT, MICHIGAN

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We belong to no combination. Do not get our name confused with other manufacturers.

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69 Dearborn Street, CHICAGO

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The BEST Air Drying Iron Enamel Made.

Try a 1-Dozen Case From Your Jobber

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CHICAGO.

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The RELIABLE GASOLINE STOVE

IS THE QUICKEST SELLING SUMMER STOVE THAT THE MARKET AFFORDS

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ESTABLISHED 1880.

THE AMERICAN ARTISAN & HARDWARE RECORD

Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

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CHICAGO, APRIL 4, 1908.

What Forestry Has Done.

Many people in this country think that forestry had never been tried until the Government began to practice it upon the National Forests. Yet forestry is practiced by every civilized country in the world except China and Turkey. It gets results which can be got in no other way, and which are necessary to the general welfare.

What forestry has done abroad is the strongest proof of what it can accomplish here. The remarkable success of forest management in the civilized countries of Europe and Asia is the most forcible argument which can be brought in support of wise forest use in the United States.

The more advanced and progressive countries arrive first and go farthest in forestry, as they do in other things. Indeed, we might almost take forestry as a yardstick with which to measure the height of a civilization. On the one hand, the nations which follow forestry most widely and systematically would be found to be the most enlightened nations. On the other hand, when we applied our yardstick to such countries as are without forestry, we could say with a good deal of assurance, by this test alone, "Here is a backward nation."

The countries of Europe and Asia, taken together, have passed through all the stages of forest history and applied all the known principles of forestry. They are rich in forest experience. The lessons of forestry were brought home to them by hard knocks. Their forest systems were built up gradually as the result of hardship. They did not first spin fine theories and then apply those theories by main force. On the contrary, they began by facing disagreeable facts. Every step of the way toward wise forest use, the world over, has been made at the sharp spur of want, suffering, or loss. As a result, the science of forestry is one of the most practical and most directly useful of all the sciences. It is a serious work, undertaken as a measure of relief, and continued as a safeguard against future calamity.

The United States, then, in attacking the problem of how best to use its great forest resources, is not in the position of a pioneer in the field. It has the experience of all other countries to go upon. There is no need for years of experiment with untried theories. The forest principles which hundreds of years of actual practice have proved right are at its command. The only question is, How should these be modified or extended to best meet American conditions? In the management of the National Forests the Government is not working in the dark. Nor is it slavishly copying European countries. It is putting into practice, in America, and for Americans, principles tried and found correct, which will insure to all the people alike the fullest and best use of all forest resources.

Take the case of Germany. Starting with forests which were in as bad shape as many of our own which have been recklessly cut over, it raised the average yield of wood per acre from 20 cubic feet in 1830 to 65 cubic feet in 1904. During the same period of time it trebled the proportion of saw timber got from the average cut, which means, in other words, that through the practice of forestry the timberlands of Germany are of three times better quality to-day than when no system was used. And in fifty-four years it increased the money returns from an average acre of forest sevenfold.

In France forestry has decreased the danger from floods, which threaten to destroy vast acreas of fertile farms, and in doing so has added many millions of dollars to the National wealth in new forests. It has removed the danger from sand dunes and in their place has created a property worth many millions of dollars. Applied to the State forests, which are small in comparison with the National Forests of this country, it causes them to yield each year a net revenue of more than $4,700,000, though the sum spent on each acre for management is over 100 times greater than that spent on the forests of the United States.

France and Germany together have a population of 100,000,000, in round numbers, against our probable 85,000,000, and State forests of 14,500,000 acres against our 160,000,000 acres of National Forests; but France and Germany spend on their forests $11,000,000 a year and get from them in net returns $30,000,000 a year, while the United States spent on the National Forests last year $1,400,000 and secured a net return of less than $130,000.

In Switzerland, where every foot of agricultural land is of the greatest value, forestry has made it possible for the people to farm all land fit for crops, and so has assisted the country to support a larger population, and one that is more prosperous, than would be the case if the valleys were subjected to destructive floods. In a country as small as Switzerland, and one which contains so many high and rugged mountains, this is a service the benefits of which can not be measured in dollars. It is in Switzerland also, in the Sihlwald, that forestry demonstrates beyond contradiction how great a yield in wood and money it

may bring about if applied consistently for a number of years.

Express Disclosures.

The Indiana railway commission which has stirred up the railway companies of the state with much vigor has gone after the express companies. By an order issued this week by the Indiana railroad commission, the rates charged by the express companies to and from all points in Indiana are reduced from 10 to 12 per cent. Ten days are given the companies in which to rearrange their schedules.

The commission accompanies its order with a long statement, in which a history of several of the companies is epitomized in support of the charge that they have been making "fabulous" profits while operating almost entirely on "water."

The commission says that it was able to get few facts from the express companies regarding their capital stock or income, and that for this reason it was forced to refer to the published statements of the express companies' affairs. The companies, it is said, refused or neglected to produce information regarding loss and damage claims, wages and salaries, legal expenses and taxes, and "yet contended that these items should be considered."

The commission says that the American Express company in 1850 had a capital stock of $150,000, which in four years was increased to $750,000, and that in 1868 the company increased its capital to $18,000,000.

It says that the Adams company in 1854 had a capital stock of $1,200,000, which by 1875 had been increased to $12,000,000. In none of these instances, the commission says, was any additional money paid to the treasuries, all the increases being from profits derived from the business.

Commenting on the Adams company, the report says:

"This great company is not without power of invention. Under an immense increment in business, with no proportional economic rate reduction, a great surplus accumulated.

"Something had to be done with it; hence, in 1898, to indemnify its shareholders against personal liability, $12,000,000 in bonds were distributed to the holders of 120,000 shares of stock, and, wonderful to say, in 1906 the surplus was again a great burden, and without even the pretense of indemnification for personal liability the golden floodgates were again opened and $24,000,000 poured out to the shareholders of this company.

"From time to time dividends, in 1906, amounting to $10 per share, and from $4 to $10 for many years, were distributed, and the company seriously assures us that it never has defaulted in the payment of interest on its bonds, and except, as stated, never declared a bond dividend.

"What a gullible public! What fortunate shareholders! What a beneficent common carrier—to its owners!"

The information set forth in the official opinion in regard to the Pacific Express company is even more interesting. This company was organized under the laws of Nebraska Oct. 1, 1879, with a capital stock of $6,000,000. There has been no stock dividend and no bond dividend, but the company has paid dividends, says the commission, with almost absolute regularity. In the last twenty years $8,334,000 has been divided among its shareholders, and, in addition, a surplus of $1,529,679 has piled up.

The commission says it got evidence as to what disposition was made of the $6,000,000 capital stock from John A. Brewster, auditor of the company, who testified that the stock was given to the Wabash, Union Pacific, and Missouri Pacific railroad companies for rights and franchises. He testified that twelve stockholders of this company are railroads, and that they get the dividends.

For Remodeled Tariff Arrangement.

THE fact that the arrangement of our import tariff is made and controlled politically rather than judicially operates seriously to the disadvantage of business interests and particularly to the disadvantage of manufacturers who employ imported products in the preparation of their finished wares. Our Congress, which regulates these affairs, is proverbially slow in attaining ends, and the known fact that what is aptly styled "tinkering" with the tariff always and unfailingly halts and prostrates the industries that depend upon congressional tariff conclusions, and these depressions begin with the earliest intimation of possible readjustments in schedules and continue until the end of the congressional deliberations; and these are not exempt from influences that too frequently, it may be said, are improper and unfair. What may be the course on the final determination of political bodies is unguessable, and what may determine the political individual in his course depends upon conditions that are problems quite beyond the acumen of mortal ken.

Present conditions of creating and regulating the tariff on imports are unsatisfactory and wrong. The entire matter should be wholly removed from politics and political influence; and this has been recently proposed in a measure seeking to establish a tariff commission whose members' tenure of office shall be of seven years' duration; but a weak point in the proposed plan is a provision that its conclusions shall be subject to a final action of Congress, or in other words, the commission is expected to gather the data and thrash over the matter and then present its conclusions to Congress to be juggled about politically to final determination. It is doubtful if this method would better matters in the least, in point of expedition or otherwise, for the political finality would remain unchanged and the item of political vulnerability would remain unaltered. Why wouldn't it be far better to remove the tariff from Congress wholly, and give the whole matter over to a permanent commission of honest and honestly chosen men acting along the same lines as does our United States Supreme Court, with full power to create and change and completely regulate the entire import tariff matter to final conclusions and comprehensive decisions? This would provide just, fair and unbiased decisions, intelligently arrived at conclusions, and prompt and more satisfactory decisions than could be reached at in any other possible way, and it would relieve the too frequently disturbed

and distressed business conditions that under present methods are of far too frequent occurrence. No matter what the constitution provides, it has been frequently amended and may again be amended to suit modern conditions.

RANDOM NOTES AND SKETCHES.

BY SIDNEY ARNOLD.

Spring is upon us and Spring styles in automobiles are beginning to worry the boys in the hardware trade. Two new eight thousand dollar cars, one a blue and one a red slid up in front of my office simultaneously the other day and the secretary and the president invited me down to chose one of them. Not that I was going to get it at all, but just for the purpose of getting a line on my taste in such matters. I chose them both in a diplomatic way.

* * *

And I then immediately chose another, a yellow one that butted in and nearly took the wheels and lamps off the two new machines. I chose it because a good looking female was navigating it and I had to. I took a long chance at that.

* * *

We got away alive but how the lady made out is a wonder unless she headed out for the prairies where there was no chance for collisions. Well she had us praying for those two new machines all right and as she broke away and we watched her as she navigated the street in a marcel line, George, my friend who owns the new blue one found himself repeating, "Gentle Jane."

* * *

Gentle Jane at a bazaar
Won a lovely motor car;
And before she fairly sensed it,
Gentle Jane was up against it.

Gentle Jane was skilled, no doubt,
But a back kick threw her out;
And in spite of her elation,
Jane succumbed to sheer prostration.

Gentle Jane whizzed through the town,
Running many people down;
Still she gave her car but praise,
Said: "It has such killing ways!"

Gentle Jane her balance missed,
Cut both hands off at the wrist;
Jane just smiled and said, "Good-day,"
In her pretty, offhand way.

Jane was 'neath the car at work,
When the old thing gave a jerk;
As it rolled across her breast,
Gentle Jane felt quite depressed.

Gentle Jane was wrecked one day,
Crushed to bits she moaning lay;
Though she didn't scold at all,
Gentle Jane felt rather small.

With a rod right through her neck,
Jane was pinned beneath the wreck;
"Ah," she said, "I must depart;
Such things cut me to the heart!"

Jane, when on a lonely road,
Heard the gasolene explode;
When this sorrow filled her cup,
Gentle Jane was all broke up.

* * *

I'm butting in among the country hardware dealers wherever I find them now. Sometimes I can pick 'em up on the streets, at other times in stores and, of course, often they drop in on me regularly and they're the goods for me all right for they know what I want to know and sometimes want to know what I know or think I know. They tell me lots. I had up the "money back" proposition with a good square Minnesota retailer a few days ago and he said:

"Have operated the 'satisfaction guaranteed or money back' policy for about 2 years. Got the worst of it, too, at first and for a time was somewhat discouraged. There are bound to be some people in every locality who will impose on you and this we must expect. However, I thrashed the subject out with myself and concluded that what was a good policy for the successful ones must also be for me. So I gave over this returned goods problem to one man—the best salesman I had—to see if we could not prevail upon those alleged disgruntled ones to buy something else. I put forth every possible effort to show them something which would satisfy them, making them feel that while we would just as soon have the goods as their money, we appreciated their trade to such an extent that we were willing to go to any trouble and pains to please them. Gradually we weeded out the undesirable customers and got the refunds down to where they're insignificant. My advice would be "stick to your policy." The women folks can do us more good with their tongues than any loss we will incur in giving them back their money occasionally."

* * *

Switching to other trade making schemes the guessing contest came up. One of them told of the experience of his brother who runs a large retail hardware store in one of the larger cities of New York state where they used a penny guessing scheme which proved very successful. A show window was filled with bright new pennies and prizes were offered the four persons guessing nearest the number. About 10,000 guesses were handed in. One evening two bank clerks entered the window and began counting with fully 5,000 people watching and waiting the results. Each 1,000 as counted was bulletined on a black board. There were 23,946 in the window. The winner guessed the exact number. A somewhat similar plan was used by an Illinois clothing store. A glass jar containing a number of bills and coins was placed in the window and left there for several weeks. The money was offered to the person guessing nearest the exact amount. Of the more than 75,000 guessers, there were twelve who guessed the exact amount, $79.63, which was divided among them.

News Siftings

The Manufacturers' Distributing Co., of 5201-5203 Ballard avenue, Seattle, Wash., writes that it would like to receive catalogues from stove manufacturers.

Manning, Bowman & Co., of Meriden, Conn., are offering denatured alcohol gas stoves of peculiar formation that are attracting much attention and which give promise of being in steady demand.

The stove and tin store of John L. Maurer, of Wooster, O., is being materially enlarged, an addition being at the present time under process of erection. The addition is said to be 20x90 feet in extent.

It is stated that a new stove foundry will be built and put into operation at Shreveport, La. The promoter of the enterprise is said to be E. R. B. Martin.

The Williams Stove Lining Co. of Taunton, Mass., has been incorporated with a capital of $25,000. The company is successor to the old stove lining firm. The officers are president, Jos. S. Williams; treasurer, John D. Williams, both of Taunton.

The American Stove Board Company, the stove board combination from which retail hardware and stove merchants derive their product of this character has revised its prices for the year 1908, and copies of the list are being forwarded to the trade.

In a neat folder announcement the Cleveland Casting & Pattern Company of Cleveland, O., successors to the Gobielle Pattern Co., calls attention to the fact that the company makes drawings, designs and patterns for all kinds of heating and cooking devices, and it invites correspondence along these lines.

A two-story addition 48x50 feet is being made to the plant of the Washington Stove Works, of Everett, Wash. The company contemplates the manufacture of a line of sheet iron heaters, as an addition to the assortment, and this building is intended for the purposes of that department. It is stated that the company also contemplates manufacturing steel ranges in the near future.

A number of new stove manufacturing plants have located in the southern states particularly during the last five or six months. The Guion Stove & Mfg. Company of Guion, Ark., has been incorporated to do business at Guion in the manufacture of stoves and ranges. The company has an authorized capital of $50,000. Its incorporators are J. L. Staffell, E. H. Kitchens, and J. M. Woods.

A leaflet from the Estate of P. D. Beckwith of Dowagiac, Mich., relates to the genuine Round Oak Heating Stove of which a very good photographic half tone illustration is shown; Doe-wah-jack and Fritz the little Dutchman are accompanying figures upon the leaflet. The reverse side of the leaflet gives interesting descriptive matter relating to the stove.

B. B. Cohen, stove manufacturer of Florence, Ala., has in process of erection, and practically completed, a new foundry plant of 100x250 feet dimensions, with an annex of 50x100 feet.

The S. Obermayer Co., has opened a warehouse at 1604 North Broadway, St. Louis, with Mr. C. M. Barker, one of the best known foundry supply men in the west, in charge. Mr. Barker, as representative of the S. Obermayer Co., has occupied offices in the Roe building for a number of years, and the company, on account of the ever increasing demand for their goods, has found it necessary to carry a large stock of foundry facings and supplies to supply the immediate needs of the foundries in and adjacent to St. Louis, at a more accessible location.

"BRAUER'S."

Retail stove merchants are pretty good people and good people like to do business with good people and get good goods and good treatment. That is about the way the good people who operate the A. G. Brauer Supply Company at 316-18 North Third street, St. Louis, Mo., figure things as relates to their offerings of stove repair castings and stove dealers' supplies generally. This business has been established many years and during this period its stove repair list has grown into a condition that permits it to promptly fill orders for everything in the shape of stove and furnace repairs that may be asked for, and in this connection it may be said that a large proportion of the supplies furnished by the company have been taken off from original patterns and are therefore to that extent unusually desirable. The company knows pretty well the line of requirements in the nature of supplies that will best fit the general retail stove trade and it is prepared to take care of these requirements promptly and satisfactorily. A good catalogue and excellent trade literature by the company will be cheerfully forwarded upon application to the address indicated herein. In applying for it kindly mention THE AMERICAN ARTISAN.

YANKEE DAMPERS.

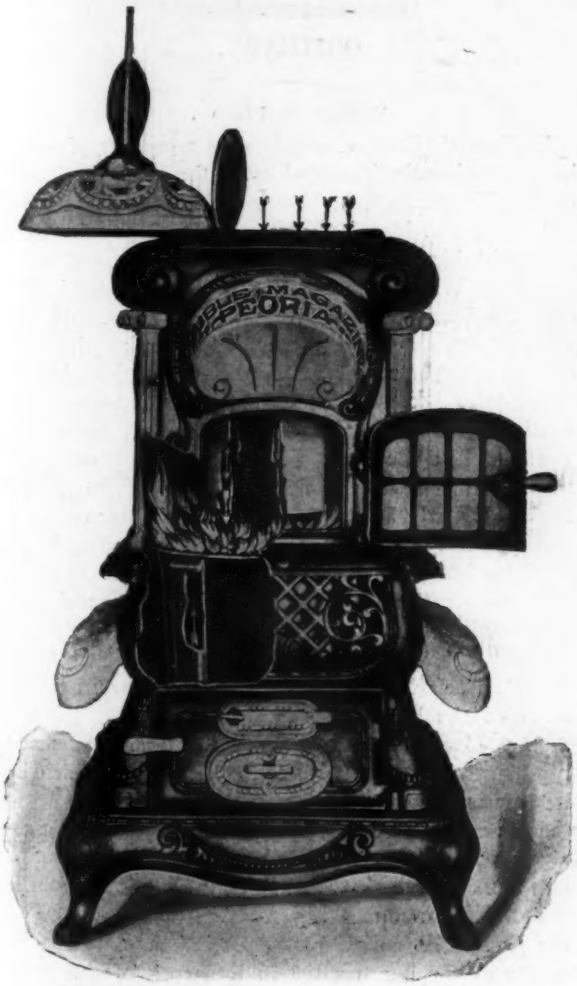
People, as a rule, do not give stove pipe and furnace pipe dampers sufficient credit for the functions which they perform. When they need a damper, they need it, and when they get it and everything runs along all right, it is commonly of little import to them what its conveniences and savings are. It is safe to say that a proper damper in a stove pipe in its saving in the wear of the stove structure itself, of the stove pipe, of labor and fuel creates an actual saving in these items alone of anywhere from 15 to 25 per cent, and in selling dampers and also in buying dampers to sell, these facts should be conveyed by the seller to the consumer, for the reason that this is a point worth understanding, and when a point worth understanding is originally made clear to the ordinary common sense buyer he not only thinks better of the article, but he also thinks much better of the party from whom he bought it. An excellent line of dampers of different patterns of all the ordinary and special shapes that are usable in stove and furnace smoke pipes, is the "Yankee" damper line that is offered to the trade by The S. M. Howes Co., of 40-46

Yankee Damper.

Union street, Boston, Mass. "Yankee" dampers are represented as the best and cheapest dampers made, and also as the easiest dampers to get into place in pipes or out of place from pipes that have ever been made. They run in smoke pipe sizes of from three inches to eight inches, and in hot air pipe sizes from six inches to fifteen inches. They are fitted with spring clips in a manner that compels them to obey the guidance of their operators and to stay in place reliably wherever set. Sample dampers, accompanied by excellent trade literature, will be furnished to the trade free upon application. In writing, kindly address the company as herein indicated, and mention THE AMERICAN ARTISAN.

THE DOUBLE MAGAZINE PEORIA.

The Culter & Proctor Stove Co., of Peoria, Ill., is in the market with a brand new creation in the shape of a double magazine base burning stove which has numerous original and peculiar features. In this



Double Magazine Peoria.

construction which is intended for soft coal uses it is claimed that the magazine arrangement and the general circulating plan through which the fuel is turned into heat products and utilized is such as provides for the consumption of the very cheapest of fuel with the very best of results. This structure is a creation wholly original by the Culter & Proctor Stove Co., which company has it entirely within their own control in a manner which permits it to protect its customer which is a very important consideration when the merit and value of the heater is taken into account. The stove is built up to the highest type of modern artistic lines, is handsomely ornamented in nickel and otherwise and is also richly mica lighted. The Double Magazine Peoria gives promise of being a winner for the season, and it is well worth considering by those who are in the field for stoves. Very excellent printed matter and illustrations of the wonderful new Double Magazine may be had on application by addressing the company as above indicated. In writing kindly mention THE AMERICAN ARTISAN.

CHAMPION STEEL RANGES.

The Champion Steel Range Co., of Cleveland, O., states that when the quality of the material used and the quality of labor that is put upon Champion Steel Ranges are considered it is easy to see what a strong combination it offers, and how by selling the Champion Steel Range the retail hardware merchant can overcome the cut price and cut quality of the steel range goods generally offered to the trade by catalogue houses or by others and make a good profit for the retail dealer at that. Champion Steel Ranges are built along lines that are standard in their character and as these goods have been upon the market for many years and have given splendid satisfaction during all of this time there is hardly an opportunity to question their efficiency and reliability at this period. They are built upon lines that are wholly liberal, with large ovens, large fire boxes, large ash pits, and in addition to being equipped up to the hour with modern improvements they are very handsomely ornamented in nickel panels and bordering work, nickel tea shelves, nickel bordered high warming closet and are provided with the best of working features. The company's catalogue will be furnished to the trade upon application. In writing for it kindly mention THE AMERICAN ARTISAN.

BLACK SILK.

Black Silk Stove Polish as offered by the Black Silk Stove Polish Works of Sterling, Ill., has been on the market a number of years. The business has grown up from the small proportion of its origin by systematic hard work and investigation and by the adaptation of the best materials and means to its manufacture. There has always been a distinct pride taken by the makers in the quality and the results of Black Silk Stove Polish and there has never been a time during its history when any other condition than this has prevailed. As a result of this care the company feels that in offering its goods upon the market it is offering what it believes to be the best article of the kind to be had and the success of the polish as is indicated by the extent of its sale may be considered very good evidence of both its qualities and the business methods of the Black Silk Stove Polish Works. The goods are nicely put up in attractive form and their canning, labeling and attractive embellishments make the goods

highly attractive for shelf uses, and these features also add materially to the salability of the product. The Black Silk Stove Polish Works has much to say concerning the excellence of its goods in the form of bright trade literature, copies of which may be had upon application to the address herein indicated. In writing kindly mention THE AMERICAN ARTISAN.

STANDARD LIGHTING COMPANY'S NEW CATALOGUES.

Two unusually good catalogues have been issued by the Standard Lighting Co., div. of the American Stove Co., of Cleveland, O. One of these relates to "New Process" gasolene and oil stoves and the other to "New Process" gas ranges. The two catalogues are somewhat alike in general appearance, each being covered in heavy chocolate brown, flexible board and both of them are with embossed exterior titles, one being executed in sharp bright black and the other in gold lettering. The one relating to gasolene and oil stoves has for its opening an illustrated article of considerable length which fully describes the evaporating process of the "New Process" theory and makes its operation clearly understood. Following this the adjustable "New Process" oven is shown with a good illustration and it is made clear as to its working by a well written page of descriptive matter. The ranges for this season run largely to the inclosed type or cabinet form and to the semi-inclosed type, in which the standards and backings are put in complete with convenient inner shelves and suitable nickel and other decorations. These are for the gasolene type. In the oil type the structures are more open and are shown with high metallic backing with shelves. The wickless oil stoves are built along very neat lines set upon high cast iron legs and are very neat goods. Following these are the junior types of oil and gasolene stoves and for this season's business there is exhibited a line of alcohol burning stoves that are much the same in appearance as the high fount gasolene types the same lines being followed.

In the catalogue of "New Process" gas ranges the arrangement opens with several pages of illustrations of parts and in sectional engraving and the text matter of these pages is intended for a complete illustration and demonstration of the uses of the several parts and several arrangements. This appeals to us as a very good plan, as it is designed to permit the user of the catalogue to know practically all of the intricate features of construction and the intentions thereof before considering the line of stoves through their pictures and text. The "Visible New Process" gas range opens the regular matter. It is of the table variety as to its height and its support is upon tall ornamented cast iron legs. There is at this situation the flat cooking surface with oven and broiler standing above the regular surface line, with the oven at the top and the broiler beneath. A feature of the oven that will be found attractive is in a window arrangement located in the oven door framing which permits the operator to keep in sight the condition of the fire at all times and regulate it as may be needed. In the visible type No. 18-93 the entire back of the structure beside the oven and broiler is framed up high in sheet metal and carries two convenient shelves. The work is nicely trimmed in nickel, which in contrast with the dark japan is rich and tasteful. Following this are other types of the "Visible" with high ovens, low ovens and high and low ovens. A splendid line of gas ranges of all popular types running from three to six hole patterns are shown and in connection a number of specialties are presented in the form of Allen's safety hose clamp, New Process oven in separated form, hot plates, Junior gas stoves, table stoves, etc. The catalogues are well printed, the arrangement is thoroughly good. The descriptive text is not only very well written but is admirably applied to the goods described by its various sections. The catalogues are printed on heavy white surfaced paper in clean, sharp, black ink, and they are both thoroughly comprehensive volumes. Copies to the trade on application by addressing the company as herein indicated. In writing kindly mention THE AMERICAN ARTISAN.

OBITUARY.

William H. Pfahler.

William H. Pfahler, who has for a number of years been prominently identified with the stove business, died at Pasadena, Cal., March 29th. He was born at Columbia, Pa., March 26, 1842, in which city, in company with his father, he entered into the tin and stove business. When but 19 years of age he enlisted in the 45th Regiment of Pennsylvania Volunteers. At the close of the war he returned to Columbia, where he opened a hardware store under the name of Pfahler & Herr, later becoming sole owner of the same. He continued in the hardware business until the tragic death of Mr. Keeley at Spuyten Duyvil, when he accepted the position of general manager of the Keeley Stove Company, Spring City, Pa., which later removed to Columbia, Pa. In 1886 he became superintendent of the Abram Cox Stove Company of Philadelphia. He later became treasurer of this company, retiring in 1905, but remaining a director of the company up to the date of his death. In 1906 he was made treasurer of the Model Heating Company, a new concern, which assumed the house heating boiler business of the Abram Cox Stove Company. He later was made president of the Model Heating Company, which he held until his death.

He was affiliated with a number of prominent associations of Philadelphia, being an honorary member of the Administrative Council of the National Founders' Association, also the Administrative Council of the National Metal Trades Association. Mr. Pfahler was very much interested in the work of the Stove Founders' National Defense Association. Mr. Pfahler became president of the National Founders' Association, an organization formed to handle labor questions of founders. During recent years Mr. Pfahler's health hindered his taking prominent part in the discussion of labor questions. He leaves a widow, a daughter and a son, the latter being A. E. Pfahler, treasurer of the Model Heating Co.

The Hardware Record.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 36 to 41 inclusive.

The Standard Hardware Mfg. Co., of Grand Rapids, Mich., was recently incorporated. Its capitalization is stated at $30,000.

Milo A. Morton of Brownwood, Tex., is said to be contemplating the establishment of a plant at Brownwood for the purpose of manufacturing automatic washing machines for household use.

It is reported that the American Washboard Company has purchased a large factory site at Helena, Ark., and that upon the final completion of the factory at that point the washboard product will be produced there.

The Arcade Mfg. Co., of Freeport, Ill., is at present experiencing quite a heavy demand for roller skate wheels made in gray iron. It is said that the skate wheel made by the company has become altogether popular and are in great demand.

C. F. Smith & Co., of De Kalb, Ill., is offering to the trade what is known as the "One Man Wire Stretcher." It is an automatic locking device and is so planned as to complete the use for which it is intended without the ordinary second man.

The Automatic Pruner Co., of Williamsport, Pa., is reported to have begun operations in its new plant. The men at the head of the company are stated to be T. J. Litzelman, P. B. Walton and F. McGill. The company's product will be automatic pruners, pruning knives, cutters, and other hardware specialties.

The New Jersey Hardware Specialty Company has been organized at Beverly, N. J. The incorporators are H. A. Stees, W. R. Hutlinger and F. M. Gardner. The capital stock of the company is placed at $30,000. The company will manufacture cooking utensils and hardware specialties of various classes.

It is reported that the Clauss Shear Factory at Fremont, O., has been closed down indefinitely rendering 300 employes idle. It appears that the finishers went on strike a short time ago as the result of their not being paid for defective work. The frictions thus occasioned necessitated the closing down of the entire shop till the matter is adjusted.

The annual convention of the Retail Hardware Dealers' Association of the Carolinas will be held at Wrightsville Beach, N. C., on June 8-10. The sessions will be held in the Auditorium at the Seashore Hotel. These dates and the exact place were settled upon by the executive board of the association at Wilmington, N. C., on March 21.

It is stated that Alderman P. H. Reynolds of Rockford, Ill., who was one of the salesmen employed by the Rockford Wholesale Hardware Co., which later was absorbed by the Kelley-Maus Company of Chicago believes that Rockford is good enough and strong enough to sustain a wholesale hardware business of the character of the one recently defunct. With this end in view it is stated that Mr. Reynolds is now in touch with parties in Milwaukee and Chicago with a view to re-establishing the wholesale hardware business in Rockford.

The National Wire & Metal Mfg. Company, Oklahoma City, Okla., has recently been incorporated with a capital stock of $5,000 for the purpose of manufacturing wire baskets and chicken coops. The officers of the company are Geo. J. Eacock, president; Guy Miller, vice-president; W. E. Seaman, secretary and treasurer; J. M. Narsh, manager.

The Board of Directors of the Consolidated Hardware Co., of Reading, Pa., met on March 25th for reorganization. It is reported the session lasted until late in the day. The following officers were elected: President, Wm. M. Griscom; Vice President, Mathan Harbster; treasurer, Samuel Y. Reigner; Secretary, John E. Harbster.

MAHER & SONS.

Some recent trade literature by Maher & Sons gives one a very clear insight into the complete, satisfactory, liberal and readily understandable methods by which this firm does business relating to its product of lighting conductors and the accessories that go therewith, and it may be learned also from this literature not only the fact that the company's business methods are honorable, straight and progressive beyond question, but that the quality of its wares, its methods of utilizing them and its thoroughly complete understanding of the business in its every detail places the company in point of desirability for general business connections far up to the top of the ladder of enterprising and progressive lightning rod people. Features of the literature are a good circular in red and black print nicely executed showing a large assortment of weather vanes, braces, pincers, burr connections, copper balet points and a very good representation of the company's 32 Strand cable wire. Another item of interest is found in the

Pure Copper Cable Rod.

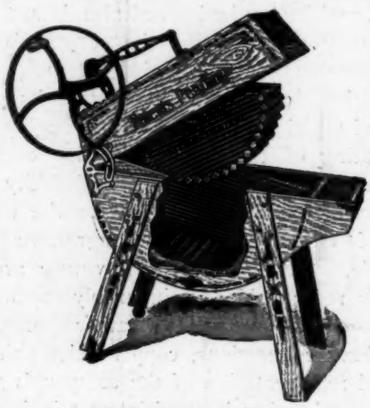
company's contract which cannot fail to be thoroughly understood by anyone who used it and in this connection it may be well to know that this company's word is as good as its bond in all conditions. A final feature of the literature is in a tidy little booklet in small type and containing in the neighborhood of 30 pages. This little booklet with descriptions, diagrams and explanations makes thoroughly clear the necessity and the proper theory in regard to lightning conductors. The company believes it has the best methods for lightning arrests in the country and will furnish handsome literature on application to the trade generally. Maher & Sons address is Preston, Ia. In writing them kindly mention THE AMERICAN ARTISAN.

The incorporation papers providing for the incorporation of the Coulter-Beegle Sales Co., of Chi-

cago have been taken out. We are advised that this active company is to continue the work of the Coulter-Beegle Co., which heretofore has not been incorporated. It is stated that the new company represents some very strong factories in hardware lines, and it will be the purpose to handle these lines diligently to the end of bringing them prominently and speedily to the attraction of the trade in various sections of the country. The active managers of the company are E. F. Coulter, Pres., J. C. Eckhardt, Vice Pres., K. Bartley Grezalski, Sec'y and H. W. Beegle, Treas. These gentlemen are quite thoroughly known in the hardware trade in various sections of the country.

"BOSS" WASHER.

The old-fashioned washboard furnishes what is conceded to be the most satisfactory apparatus for washing and cleansing clothes that has yet been offered, as far as it relates to the perfection of the work that can be performed by its use, but the method of washing in which it is employed is altogether too laborious and too slow for people of the present age, and as a result what are known as washing machines have come



The Boss Washer.

into favor, and in their construction the chief aim of their makers has been to approximate as closely as possible the methods and results of the old-fashioned washboard. In this endeavor the Boss Washing Machine Co. of Cincinnati, O., has accomplished most satisfactory results in its machine known as the "Boss" Washer. In the operation of this machine, the turning of a wheel causes two rub-boards inside of the machine and which are fashioned after the washboard pattern to move backward and forward in opposing directions. The proper complement of clothing is situated between these two rub-boards whose gentle rubbing action scrubs the clothing and at the same times forces water through their every fiber, and thus the dirt is properly removed in a manner that cannot otherwise be approximated. The upper rub-board adjusts itself within elongated bearings in a manner that permits the washing of a single garment or a quantity of garments with equal facility. The "Boss Washer" is said to be the only machine that has an extra chamber beneath the two vibrating rubbers for the accommodation of all dirt and lint that is separated from the contents of the machine to settle into, which provides for a cleanly and sanitary condition of the fabrics operated upon. This feature is a highly important one, and one which the manufacturers of the machine consider indispensable. The "Boss Washing Machine" is quite well known in the trade, and it is known as a highly successful and satisfactory washing device. The machine is built of Louisiana red cypress throughout. This is known as the most satisfactory wood for washing machines, as it does not absorb water to the extent that most other woods do, and, as a consequence, the machine continues in a sanitary condition. The machine is simple in construction, and operates with great ease. It is built in various sizes, and consequently in various capacities; the ordinary domestic machine being of sufficient capacity to wash ten shirts or an equal bulk of other garments at one time, and it may be operated by hand or by power. In its general construction the machine is covered in all of its details and design by letters patent, and it is presented to the trade, and to users as well, in a completed form, thus avoiding the labor and annoyance of assembling parts in a manner that is incident to the buying of many other machines. Very good illustrated literature and prices may be had by addressing the company as herein indicated. In writing, kindly mention THE AMERICAN ARTISAN.

IWAN'S POST HOLE AUGER.

People all over the world, it may be said, who have to do with the digging of post holes have reason to be thankful to Iwan Bros., of Streator, Ill., for the attention they have given to the matter of making post holes and for the many conveniences of practical nature that they have put upon the market to accomplish work of this nature. The illustration herewith is of Iwan's patent Improved Post Hole or Well Auger, which bores into the earth in about the same manner as a first class sharp ordinary auger bores into soft wood. And by the use of the Post Hole Auger the earth and materials that have been put within its grasp may be readily lifted out and disposed of by the aid of the boring handle. It does not require a very vivid imagination to picture the difference between this method of boring post holes and the method of digging them out with a spade or a shovel—a thoroughly back breaking process—and besides this, post holes that are bored for substantially the correct size of the post, are well known to be better supports for them than are holes dug with shovels in which the posts must be filled around with soft earth in order to remain in the position intended. In addition to the Post Hole Auger, Iwan Bros. make many other articles for post hole digging under various conditions and in various soils, all of which are very well known to people who have use for instruments of this kind. Some very good literature relating to these instruments and others of the company's patented devices may be had upon application to the address above indicated. In writing kindly mention THE AMERICAN ARTISAN.

A SPORTING GOODS WINDOW.

The Jamestown, North Dakota, hardware window exhibit shown in the accompanying illustration is a clever effort in the sporting goods line by Messrs. R. L. Scott & Co., hardware dealers of Jamestown, North Dakota, the designing and arrangement of which is credited to Mr. H. Reed, who is connected with the firm's business.

The window is a roomy, high and good shaped one for the display and the large single plate glass front of it naturally adds in the effectiveness of the display. The background of the exhibit is laid with black cloth upon which centrally located is placed an attractive "Winchester" display board, which by illustration and examples relating to Winchester arms is wholly consistent and in keeping with the window's general theme of sports. The central figure of the work a full size life like deer that is a good example of taxidermy. The narrow window side is utilized for displaying twelve gauge "repeater" shells. The two carton pyramids are of "repeater" ten gauge shells and two more shell pyramids in cartons are made prominent near the window. The gun stacks are made up of "New Rival" shotguns and rifles. Under one of the gun stacks is a group of ducks and under another a group of prairie chickens, all of the birds being exceedingly lifelike. The floor of the window displays revolvers, hunting coats, gun cases, hunting knives, shell belts, goose and duck calls, dog collars, whistles, fishing rods and accessories, etc.

A sporting goods display is always interesting. The one here presented gives evidence of both study, skill and a knowledge of the uses and requirements of the articles displayed. It should have and no doubt did attract much attention and favorable comment and as a trade producer no doubt was successful.

Sporting Goods Window by R. L. Scott & Co.

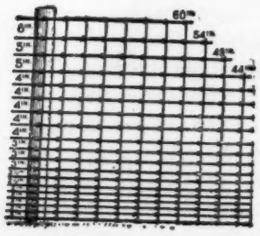
AMERICAN BOLT AND SCREW CASES.

The advantages offered in the revolving bolt and screw cases, manufactured by the American Bolt & Screw Case Company of Dayton, O., are such as would seem to make it next to impossible for a well regulated hardware store to carry an assorted line of bolts, nuts, screws and such items without some sort of a device of this kind. The revolving cabinets or cases are arranged in various ways for assortments of sizes of a single class of bolts or assortments of sizes for mixed classes of bolts, for assortments of sizes of particular classes of screws or assortments of sizes of mixed classes of screws or for assortments of mixed classes of bolts, nuts and screws and many other combinations such as may be found desirable for persons who carry goods of this class for sale, or for manufacturing concerns that find it necessary to have some method of properly caring for stocks of small items so that they may be readily arrived at when needed.

These bolts and screw cases have been upon the market for a great many years, during which period although they have retained their original forms to a great extent, they have been much improved upon in many ways and specially built arrangements have been added to the line. A catalogue of the goods shows by illustration and otherwise a very large field of usefulness for cabinets and cases of this particular kind, both as to their uses for regular hardware stores or for special uses for which there is a large demand for them. Catalogues may be had by applying to the address above indicated. When writing kindly mention THE AMERICAN ARTISAN.

POULTRY FENCE.

The Denning Wire & Fence Co., of Cedar Rapids, Ia., claims that it beats the world on poultry fence, and upon this commodity it certainly has built up a very great business and its fences have become thoroughly popular. This, of course, is largely due to the quality of goods that the company delivers, and it may be said to be partly due to a very excellent business method, of prompt shipments and careful attention to orders by the company. One of the features of its business is in prompt full and mixed car shipping of its many products in woven fence, poultry netting, peerless cabled fence, barbed wire and nails. In the illustration herewith will be noted the progressive manner of dividing the horizontal wire lines which at the bottom begin at spaces that perfectly provide for the care of poultry and so on upward the separations are arranged in a manner that precludes the passage of any animals at points within reach. Some very good illustrated descriptive matter and a catalogue and prices may be had by addressing the company as herein indicated. In writing kindly mention THE AMERICAN ARTISAN.



Denning Improved Fence.

THE "FLYER."

The "Flyer" is the title of one of the popular family washing machines of the lever type made by the H. F. Brammer Mfg. Co., of Davenport, Ia. The "Flyer" is one of those high grade machines

which get out into the market and sell themselves very largely because of the fact that they are thoroughly attractive in appearance and that when put into use they give satisfaction so promptly as to make themselves friends of everybody in the neighborhood where they are originally used. The tub of this machine is made of the best Louisiana cypress lumber thoroughly air dried and kiln dried. The staves and bottoms are corrugated on the inner side so as to afford the largest possible rubbing surface. All joints are tongued and grooved and three extra heavy steel hoops are driven onto the tub exteriorally by a specially designed process in which there is used a special press exerting five tons pressure upon each hoop. The machine carries a double lid and the legs are extensions of the tub staves. The "Flyer" is a handsomely finished machine. It is rich in its natural color, the hoops and mechanism are aluminum bronzed and a rich lithographed label adds to the hightening of the color of the apparatus. Excellent illustrated literature may be had upon application to the company as indicated. In writing for it kindly mention THE AMERICAN ARTISAN.

CUTS AND SEWS.

By a recent invention of an Illinois woman it is now possible for dressmakers and tailors to cut a piece of goods and baste it at the same time. This wonderful piece of mechanism is attached to an ordinary pair of shears in a very simple manner, forming a combined cutter and baster.

The sewing mechanism operates with the movement

Scissors That Sew.

of the shears, basting the fabrics as they are cut. During the operation of cutting the shears move forward on the fabric, the length of the basting stitch depending upon the extent of the forward movement of the shears at each step of the cutting. The mechanism consists of a needle and looper, with a spool carrying the thread attached to the shears. As the shears are closed the needle descends and when the shears are opened the needle rises, a stitch being thus made. Customarily the fabrics will be placed face to face, and as the shears are operated to cut the desired pattern, the needle and the looper baste the fabrics.

RETAIL HARDWARE DOINGS.

NEW FIRMS AND CORPORATIONS.

Abingdon, Va.—The Vance Supply Co. has been incorporated with a capital stock of $5,000 to deal in hardware.

Norfolk, Va.—E. M. Rogers Mfg. Co., incorporated with a capital stock of $10,000, to deal in hardware.

Mentone, Ind.—Chas. Boggess is a new hardware dealer here.

Union, O.—Stone Hardware Company, incorporated with a capital stock of $14,000.

Seattle, Wash.—Ernst Hardware & Plumbing Co., will increase its capital stock from $50,000 to $100,000.

Dyersburg, Tenn.—Dyersburg Hardware & Furniture

Co., amended charter changing name to Dyersburg Hardware Company.

BUSINESS CHANGES.

Truesdale, Ia.—Geo. Tutt has purchased the Ledoux hardware store.

Crookston, Minn.—L. E. Larson succeeds C. J. Gilbert in the hardware business.

Pocahontas, Ia.—G. S. Robinson and W. W. Howard have purchased the Parker hardware store.

Eagle Lake, Minn.—Fred Day has purchased the hardware store of R. Wechtler.

Alvin, Tex.—T. C. Edwards has sold his hardware business to J. W. Carlisle.

Burlington, Vt.—The Vermont Hardware Company succeeds the Holton Hardware Co.

Burwell, Nebr.—F. A. Johnson, hardware and furniture dealer, has sold his business to Eugene Troxel, R. J. Mitchell and B. F. Bunnell.

MISCELLANEOUS.

Boise, Idaho—The Idaho Hardware & Plumbing Company's store was burglarized.

Union City, Mich.—It is reported that the hardware firm of Wilcox, Ainsley & Company are in the hands of a receiver.

Sabin, Minn.—The hardware store of Fred Scheel was burglarized.

Salisbury, N. C.—The hardware firm of C. Froneberger & Co. is reported in bankruptcy.

Baltimore, Md.—The hardware firm of Henry Keidel & Company was damaged by fire.

Falconer, N. Y.—Bailey Brothers' hardware store was burglarized.

Merrill, Mich.—Senator Jos. H. Whitney's hardware store was destroyed by fire.

WONDERFUL LIGHTNING.

Demonstrations of Its Remarkable Force and Actions—Origin of the Lightning Stroke—Numerous Reports of Curious Freaks of Lightning—Protection From Lightning—Beneficial Results of Lightning Strokes.

BY H. F. KRETZER, ST. LOUIS, MO.

No. 4.

Many persons labor under the delusion that they would be safe from the destructive effects of thunderstorms if they sought underground places of refuge, such as caves, mines or other underground excavations. We have numerous phenomena to demonstrate the falsity of this reasoning. A lightning stroke does not in all cases lose its force as soon as it reaches the earth, it sometimes penetrates, and its effects are felt at great distances below the surface of the earth. This is very likely to be the case where lightning strikes the earth at places where there are croppings of metalliferous ores, or where the stratified condition of the earth or the nature of the soil is peculiarly adapted to conduct the charge of electricity that may fall upon it. This was undoubtedly the case in the following instance: At Nevin, Ind., June 11, 1887, a large tree that stood on the edge of a pond was struck by lightning, when the water began sinking and soon the pond was perfectly dry. This charge of electricity passed down the tree, through the roots and opened up a subterranean passage, through which the pond was drained. At Farrandsville, Pa., on July 25, 1887, a singular occurrence took place at the fire clay mines of the Pittsburg Company. Lightning struck the railroad track near the entrance to the mine, and in an instant the chambers of the mine were filled with the electric fluid. All the miners were stunned, and William Ross, the mine boss, and James Mull, Jr., were knocked down. None of them were seriously injured. The men who were in the mine at the time were all practical miners and say they never knew of a similar occurrence before. In "Poggendorff's Annalen" there is a record of this nature. On July 5, 1855, while the miners working along a lode of ore, in the mines of Himmelsfurth, following their usual vocation, some 900 or 1,000 feet below the surface of the earth, were surprised by a brilliant flash, and by receiving sudden violent shocks. Some of them felt a blow on the legs and arms, others again felt it on their backs. One miner was thrown violently against one of the walls, and two others who had been working with their backs to each other, found themselves suddenly turned face to face. Each of these supposed the other had struck him on the back. Lightning had struck the earth and followed the vein of ore down into the mine.

On July 3, 1897, near Shamokin, Pa., Charles Rutz, Eli Dreher, William Black and William Rutz were struck by lightning while working in the Reliance mine 1,000 feet beneath the surface. They were all rendered unconscious, and Charles Rutz was speechless, while Dreher's left arm was found paralyzed after he had recovered. Lightning struck at the head of the slope and followed the rails to the bottom and out to the face of the gangway, where the men were at work. The miners state that the dark chambers were brilliantly illuminated as the lightning bolt rushed toward them, and supposing that mine gas had exploded they threw themselves on their faces.

It is interesting to note that demonstrations of lightning causing destructive effects occur, or are likely to occur, anywhere on the surface of the earth on the plain, in the valley or on the mountain top, in the air and underground. We will now see if we could find a safe refuge upon the waters. No doubt many of the readers are aware that lightning is very destructive to all objects surrounded by or situated upon water. Before Sir William Snow Harris perfected lightning conductors for ships many vessels were lost every year by lightning. On July 3, 1891, at Fernandina, Fla., a lighter connected with the work on the jetties was struck by lightning and five men were stricken down in an instant. On July 16, 1891, at Duluth, Minn., the passenger steamer India, lying at the dock, had her top mast shattered. On August 18, 1891, at Alton, Ill., a peculiar phenomenon was observed during the terrific electric storm that prevailed at the time. The gentleman who saw it states that it appeared as if lightning struck the Mississippi river and as if four streaks of blue and yellow flames came together. The odor of sulphur was distinctly noticeable and the water was thrown up in clouds of spray. On March 14, 1893, lightning struck the Stonington Line steamer New Hampshire on her trip from New York to Stonington, doing considerable damage and greatly frightening the passengers. On June 9, 1894, the British schooner Sarah E. Douglass, from Nassau, arrived at the port of Baltimore with her rigging badly torn and in a leaking condition. She had been caught in a terrific storm and was twice struck by lightning. The Douglass, in command of Captain Cameron, left Tarpum Bay June 1, that same afternoon a storm arose, the heavens grew dark and lightning flashed continuously. About 5 o'clock, while in latitude 26 degrees 8 minutes, there came a succession of vivid flashes, a bolt struck the top mast and shattered it, at the same time loosening the after rigging. The men were sent aloft to repair the damage when another bolt slit the rigging shook up the men. All night streaks of blue fire chased about the ship until the crew almost gave up hope. On July 17, 1894, at Denver, Colo., four boys were fishing in Argo Lake during a thunder storm. James Burrell was instantly killed by a flash of lightning and his body forced to the bottom of the lake, where it stuck in the mud; Robert Henry was paralyzed, and the other two were stunned. On August 26, 1894, at Atlantic City, N. J., William Carr was struck by lightning and instantly killed while bathing in the surf. The lightning struck him on the left temple and coursed down his left side, which it scarred, burnt and blackened.

An Oregon firm combined its spring opening with a great house furnishing sale, the offerings in homegoods helped and being helped by the regulation offerings in every department.

Advertising Department

Our readers are invited to send in copies of their advertisements in the local press for criticism. All communications should be addressed to the "Advertising Department" of THE AMERICAN ARTISAN.

Weaver, Palmer & Richmond display a unique and interesting advertisement in which they call attention chiefly to the five-inch outside machinists' calipers at a reduced price. This instrument as it was inserted offers an attractive exhibit. Following this in a modest way attention is directed to a list of other hardware goods in which numerous other articles are mentioned together with prices at a small lay-out of advertising space. The manner in which dog muzzles and collars are mentioned separately leads to the conclusion that the offering is a specialty. The corner seal of the advertisement with the street number upon it is an attractive figure in the advertisement, as is also the chain ruling border around the advertisement. It is unfortunate, however, that this chain should show so many broken spots. This advertisement occupied 7½ inches, double column, in the *Union Advertiser* of Rochester, N. Y.

* * *

We offer the advertisement of the gas company of Augusta, Ga., for the reason that it is so good an advertisement. In thirty-eight words this advertisement tells about a special sale of three days' duration that the gas company will make of second-hand gas ranges. It doesn't seem to be necessary to know any more about the sale than what is stated in this advertisement. The amount of space used is not large but the arrangement of the advertisement is thoroughly good and it can hardly fail to attract attention. This advertisement is well worth studying because of its strength and prominence. It occupied six inches' space, three columns wide, in the *Augusta Chronicle* of Augusta, Ga.

* * *

The advertisement by the Kelley Hardware Co. of Duluth, Minn., is for its purpose a model ad. In this advertisement it is intended to call attention to andirons and fire sets. This has been accomplished in a highly creditable manner. It will be noticed that in the type that is shown in the advertisement there are but two styles, namely the display and the body. The arrangement of the matter is thoroughly good and the fact that prices are distinctly stated in plain type allows the reader to draw his own conclusions at once concerning the goods. This advertisement occupied 4½ inches, double column, in the *Duluth Evening Herald* of Duluth, Minn.

Heating and Ventilating

THE BONNOT COMPANY.

The "New Cellular Over Draft Fire Pot" used by the Bonnot Co., in the manufacture of its "Canton Eagle" and other furnaces is used as a means for calling attention to the excellent qualities of the furnaces into which this fire pot construction is embodied. It will be readily seen that it is of the Cellular type. It is not entirely new to the trade but the fact that the fire pot casting is used in a reversed position from what it is commonly found serves to call attention directly to it and to learn the purposes of this order of arrangement. In practice the company has learned that with this particular fire enclosing arrangement inserted in the manner in which attention is here called to give the very best of results as to combustion in a general way and an utter freedom from clogging up of the fire pot in any way which is in itself a feature that indicates progress over former methods. One of the problems solved in this arrangement is the immediate elimination of ashes as rapidly as they are created and it will be naturally understood that this elimination must wonderfully increase the value and efficiency of the fire. The company is prepared to furnish to merchants excellent catalogues with illustrations which show all of the features of their work and which include descriptive matter that will allow anyone to completely understand the work that is presented to them. In writing kindly mention THE AMERICAN ARTISAN.

"New Cellular Over Draft Fire Pot."

BEAVER FURNACES.

A catalogue of Beaver Furnaces, by the Danville Stove & Mfg. Co., of Danville, Pa., is compact, convenient and well arranged. Illustrations are shown of the Beaver Furnace, the Regal Beaver Furnace, and the Regal Beaver Junior Furnace, these being the three distinct patterns of warm air heating devices that are offered by the company. A very good illustration of the Beaver furnace is shown without casing and from it a good idea of the general features of construction is to be had. It is of heavy cast iron pattern with large steel return radiator and some very excellent original ideas in the back flue arrangement. In the construction there is provided a very large ash pit, an equipment of separate bar triangular grate arrangement, and an unusually large and well located feed door with a center wheel register. The Regal Beaver Junior is also shown without casing. It is also largely of cast iron construction. The arrangement being a cast ash pit section and a heavily corrugated cast fire pot with the extensions above this in heavy sheet steel carefully riveted. A sectional engraving is also shown of the Regal Beaver Furnace, which also is a combination of cast iron and heavy sheet steel construction. Some very good introductory matter is furnished in the opening pages of the work and some good treatment is given to the subject of methods of heating in the abstract and as they relate to the Beaver furnace and good descriptive matter and testimonials are offered relating to the Beaver Furnace line. The catalogue is well arranged and well printed. Copies may be had by addressing the company as herein indicated. In writing kindly mention THE AMERICAN ARTISAN.

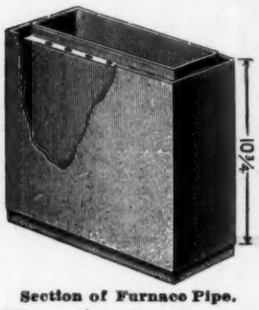
GILT EDGE BADGER.

The Gilt Edge Badger Furnace by the R. J. Schwab & Sons Co., of Milwaukee, Wis., is essentially a hard coal heater designed to meet the wants of those who are so situated as to require a furnace of this character. In its production the fact that it was intended strictly for hard coal burning was at all times and under all conditions kept in mind, therefore it will not be found to be a combination affair that is expected to burn any kind of fuel that you can put into it, but merely a hard coal worker and a thoroughly efficient

and satisfactory one at that. It is built on excellent lines, in cast iron construction and carries a very large steel plate return radiator. Taking into consideration the body which is all radiating surface and the high round dome which is all radiating surface and the large steel return radiator whose purpose is entirely that of radiation it will be understood that a vast amount of heating surface is put into action and that a vast amount of heated air must be supplied. The Gilt Edge Badger Furnace is equipped with all of the best modern devices and conveniences. It has a large ash pit, a large fire pot, a roomy combustion chamber and in general it is designed as a thoroughly economical worker. Catalogue and excellent printed matter relating to this and other warm air heating furnaces by the company may be had upon application by addressing as indicated above. In writing kindly mention THE AMERICAN ARTISAN.

MICHIGAN SAFETY FURNACE PIPE.

Michigan Safety Furnace Pipe is so called because of the provisions in its manufacture which preclude all possibility of its exterior becoming sufficiently heated to set fire to the portions of buildings which enclose the pipe in stack form in the walls. To bring about the safety condition the pipe is made with an ample air chamber between the inner and outer sections of the completed structure.



Section of Furnace Pipe.

There are many patterns of pipe made along these lines that fill these conditions, but it is represented that the pipe here particularly referred to is well adapted not only to meet the requirements but to continue to meet the requirement of safety as it is claimed to be made in such a way as to keep the inner and outer walls in the exact position in which they were made for the purpose intended. To accomplish this there is let in between the inner and outer sheets at somewhat close intervals metallic separating partitions that hold the walls apart, keep the pipe in shape and are perforated to permit of a continuous circulation of air along the entire line of connected piping at all times. An advantage in favor of the pipe made by the Michigan Safety Furnace Pipe Co. is in the fact that there are no wings to pull out nor are there any cleats to bend in its fitting. It is represented that the exactly shaped inner walls as they project above the shoulder in the illustration herewith in connection with the square even shoulder of the structure affords an exact and permanent connection without the aid of any other device whatever, and that the rigidity of a continuous piping put up with it is such as would be had were the completed line made of a single piece. There are many interesting things relating to the furnace pipe in question that are well worth understanding. A very good catalogue illustrates the features of the work fully and in connection it furnishes descriptive matter and prices. It may be had upon application to the Michigan Safety Furnace Pipe Co., corner Brooklyn & Abbott streets, Detroit, Michigan. In sending for it kindly mention THE AMERICAN ARTISAN.

A PRETTY FOLDER BY CHAS. SMITH & CO.

A pretty salmon colored folder of envelope size relates to the Hero Furnace and the Hero Boiler, by Chas. Smith Company of Chicago, Ill. The Hero furnace as will be remembered by the trade is one of those purely reliable, staunch and enduring solid cast iron structures in which genius and care in the manipulation of the material has brought it to a point where it provides probably every atom of heating force that is possible for its equivalent in every form. The Hero Boiler relates to the use and development of hot water practice and these owing to the fact that Mr. Chas. Smith of the company is regarded as an expert along these lines will be found in such formations as to at least have had the best of thought and the best of consideration that a practical and inventing hot water engineer has found it possible to apply to them. The printed item is a tasteful one and it is but one of the items which the company will send to the trade upon application.

OBERMAYER'S BULLETIN.

Volume six of *Obermayer's Bulletin* of Foundry Information, covering its issues of January to October, 1907, is tastefully bound in brilliant red cloth with gold front exterior title with red edges. The volume is replete with fresh and interesting matter, relating to modern foundry practice, foundry supply data and other choice matter of kindred import. It is nicely illustrated and exceedingly interesting and useful. It is by the S. Obermayer Co., of Cincinnati, Chicago and Pittsburg, manufacturers and first hands in modern foundry supplies and equipments.

PARAGRAPHS.

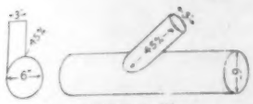
Several reports have been in circulation relating to the cause of the recent disastrous school building fire at Collinwood, O., in which several hundred school children lost their lives. The statement has been offered that the fire was caused in some manner by defective hot air furnace. This statement THE AMERICAN ARTISAN is prepared to contradict absolutely, and to state that the building was in no way heated by a hot air furnace, but it was heated by steam boilers.

The firm of Peck, Anderson & Peck Company, Cincinnati, O., has recently been organized with a capital stock of $50,000 for the purpose of manufacturing hot air furnaces. John K. Peck and Robert E. Peck were formerly identified with the Peck-Williamson Company; A. J. Anderson was vice-president of the James McWilliams Company, Louisville, Ky., which position he held for a period of ten years. L. D. Ault, another incorporator, is vice-president of the Ault Woodenware Company. The firm will locate at Court street and Broadway, Cincinnati, occupying considerable space, and the building is being prepared for their occupancy. The company will manufacture all kinds of heating and ventilating appliances.

Tinshop

CYLINDERS INTERSECTING IRREGULARLY.

Mr. Martin Foeste, of Paris, Texas, in a recent communication asked for the submission of the problem involved in the accompanying drawing to the sheet metal workers, who read THE AMERICAN ARTISAN. In connection with a request that some of the readers would furnish a pattern development for the same. Several replies have been received and published. In this issue we have the pleasure of presenting a development of the pattern by H. C. Bauman, Rock Valley, Ill.

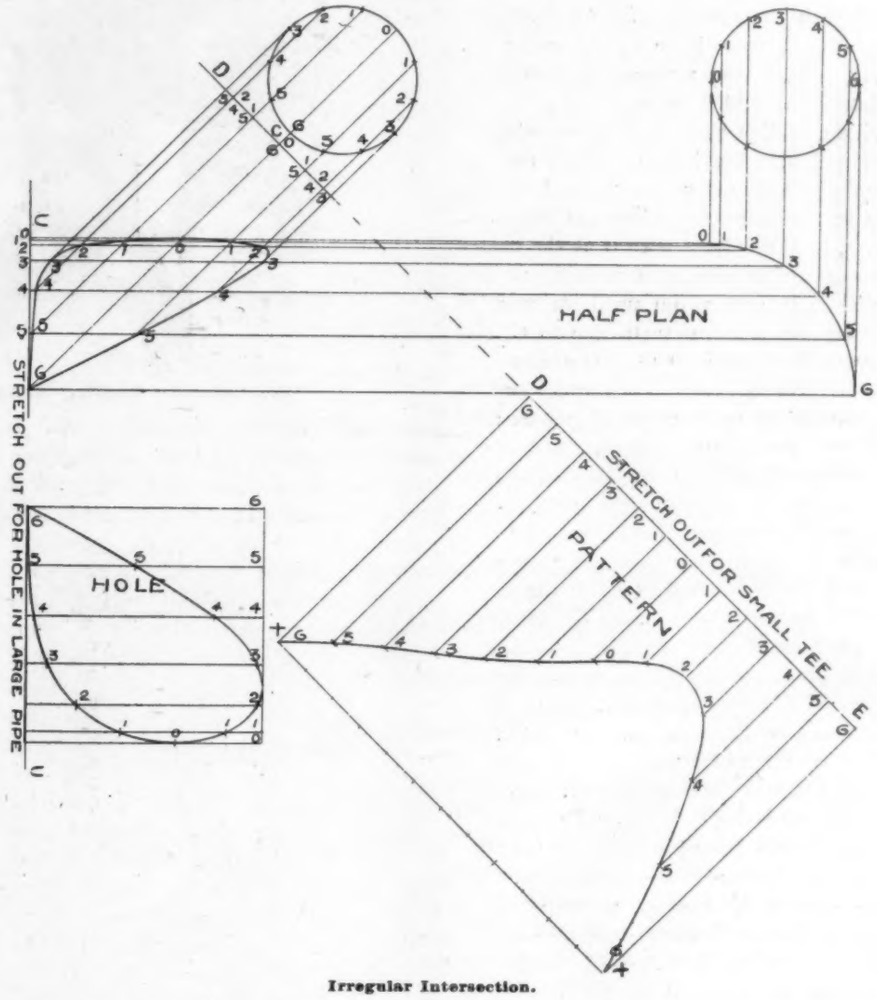


A 45 Degree Tee.

To THE AMERICAN ARTISAN:

Accompanying this I am sending you a drawing and description for an irregular intersection as asked for by Martin Foeste, of Paris, Tex.

"Draw half plan of large pipe and on each end of same draw small pipes as shown. Divide small circle on top in an equal number of spaces numbering each of them as shown. Then drop lines O, 1, 2, 3, 4, 5, 6 till they meet at quarter circle of large pipe and number the same. Then drop lines from angle end till they meet lines drawn from quarter circle. Number these points which give you the miter line. Next lay out the stretchout of small Tee as shown at D-E-X-X. Divide the stretchout in equal number of spaces, the same as the small circle. Then using G-D-E as base line and with dividers set space figure 6-6 of angle. Carry to stretchout and mark small arch on line D-6 and C-6. Then set the dividers at 5-5 and carry to line 5 of stretchout and so on around the point of miter using D as base line, to set dividers from. Then trace a free hand line through these points which will give you the pattern for small Tee end. Next from hole in large pipe lay out stretchout using U-U for base line and carry spaces from quarter circle of large pipe and number same as shown. Then set dividers on base line U from 5 and span to 5 and carry to stretchout line 5 small acre. Next span from base line 4 to 4 and carry stretchout to line 4 and mark small acre and so on around the miter point till you have them all on stretchout. Then trace free hand line to these points which gives you pattern for the whole.



Irregular Intersection.

Yours truly,

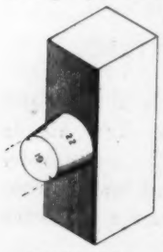
H. C. BAUMAN.

Rock Valley, Ill.

Why not to-day begin in your own store to steer for the time when variety, not quantity is the feature of your merchandising?

FLARING RIM.

The following solution of the Flaring Rim Problem propounded by Geo. Broeker of Beardstown, Ill., is submitted by H. C. Bauman of Rock Valley, Ia. The original problem is shown in the sketch herewith. A flaring rim is to be fitted up against a sheet metal box as shown. The rim is to be 22 inches at the large end and nineteen inches at the small end and is to be used in the manner indicated in the sketch. This is to be done by triangulation and the old method that is by a sweep. THE AMERICAN ARTISAN will be pleased to receive other communications and drawings relating to this problem. What is desired is the pattern development for the flaring rim. Mr. Bauman's contribution follows.

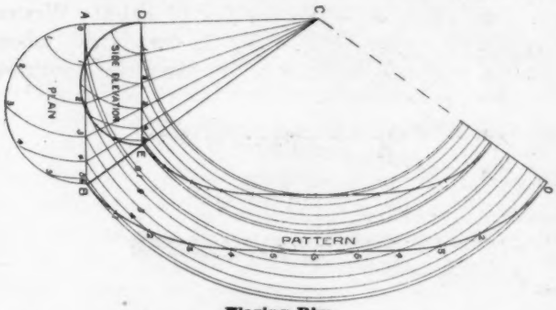


Flaring Rim.

TO THE AMERICAN ARTISAN:

In compliance with the request of Geo. Broecker of Beardstown, Ill., in your issue of February 15, 1908, for a flaring rim, I take pleasure in submitting the following description and drawings:

First, draw side elevation as D E A B diameter of top and bottom and also the height. Then on line A B draw a semi-circle diameter of large end of rim. Divide this into an equal number of spaces here 6 as follows, 0, 1, 2, 3, 4, 5, 6. Now with 0 as the center set dividers at 0 1 and sweep until meeting at line A B. Then with 0 2, and so on until all meet at line A B. From these points draw a line to C, and using C as center and dividers set to C B sweep each line indefinitely up to 0 as shown. For small end do the same. Then set dividers at same distance as used



Flaring Rim.

in spacing semi-circle and space pattern starting from 6 to 1 and passing on the other line and so on until you have spaced around the lines to 0 on the other side. Draw a line from 0 to C and a free-hand sketch through each point found as shown by the heavy line and you have your pattern complete. Allow for locks. This pattern is an easy one to draw when the workman understands it. Yours truly,

H. C. BAUMAN.

Rock Valley, Ia., March 5, 1908.

A SWEATING ROOF QUESTION.

We have a tin roof over a store room occupied as a furniture store. The house is 40 feet wide, 132 feet deep and three stories high. It is well ventilated. For some reason, which we are unable to understand, the roof sweats very bady. At times it drips off into the house as if it were raining. We have put three large ventilators in the roof, but these do not help matters. There is no fire in the building except in a small office on the street floor. We desire through the columns of THE AMERICAN ARTISAN to be informed by some of its many readers, as to what is the cause of the sweating of the roof and to learn how it may be remedied.

Very truly,

DIUGUID & CO.

Lynchburg, Va., March 2, 1908.

A HEAVY BENDING MACHINE.

The accompanying illustration is of a four-foot heavy bending machine designed for hand power operation by the J. M. Robinson Mfg. Co., of 3282-3288 Spring Grove avenue, Cincinnati, O. This machine is

Four Foot Heavy Bending Machine.

built upon the best of modern lines. It is built heavy and substantially and in its designing and its action the utmost of power and exactness of operation has been secured. It is one of the types of sheet metal working machines that the company has devoted much attention to and its success from points of convenience and reliability of operation has made it thoroughly popular and quite indispensable when considered along the lines for which it is intended. This machine has a capacity for 12 gauge soft steel and lighter weights. It is of new design and is unusually efficient for short bending. The machine can be fitted with a nose piece for the purpose of forming round corners when so desired. The machine weighs 2,000 pounds. It acts freely and with great precision and will be found a most desirable item of the equipment of sheet metal working outfits. Illustrated literature, prices and other conditions may be had by addressing the company as herein indicated. In writing kindly mention THE AMERICAN ARTISAN.

ALWAYS WELL SUPPLIED.

Tanner & Co., of Indianapolis, Ind., pride themselves upon always having on hand a very large and well assorted stock of tin and roofing plates. It is stated that the company constantly has on hand twenty different grades of roofing plates alone and it is also represented that its continuous supply of bright

tin, galvanized iron and black sheets is greater than can be found in any other stock in Western territory. The firm has built up a reputation for prompt shipments and for variety of stock that has made it a leading factor in the tin and sheet metal trade of the West.

APOLOGY TO GUMMEY, M'FARLAND & CO.

The following letter of apology has been sent to THE AMERICAN ARTISAN by Gummey, McFarland & Co., Philadelphia, who received it from the secretary of the National Association of Master Sheet Metal Workers, with the further permission to send the letter to the trade press for publication:

The National Association of Master Sheet Metal Workers of the United States.

Secretary's Office,
Norfolk, Va., March 23, 1908.

Messrs. Gummey, McFarland & Co., Philadelphia, Pa.

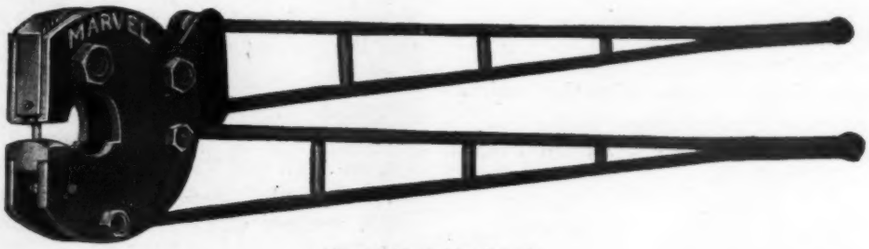
Gentlemen:—It is my duty and pleasure to inform you that I am authorized by the Board of Directors of the National Association of Master Sheet Metal Workers to tender you an apology for the unintentional injustice that was done you by the dropping of your name from the list in the *Master Sheet Metal Workers' Journal* of recent issues.

It was found upon investigation that an injustice had been done you, and the editor and owner of that paper was directed to restore your name at once. It is not the purpose of this association to do an injustice to any one by any means, and we extremely regret the transaction, which should not have happened.

Very respectfully yours,
(Signed) W. H. BARNARD, Secretary.

MARVEL PORTABLE PUNCH.

The Marvel Portable Punch, an illustration of which is shown in connection herewith is really a distinct wonder in its punching and operating abilities and in addition to this it possesses a distinct merit of being light and portable and of accomplishing results in punching and cutting that are not at all possible to ordinary portable punching devices. This instrument is greatly needed in any manufacturing industries where metal is used in a manner that requires cutting or punching. It punches a hole ⅜ inch in size from inside corner of angle iron in its portable form and in its fixed form which is merely a matter of setting it it will do even more wonderful work than this. This is a punch which weighs but sixteen pounds and its length is but 38 inches. It can be used in many places where no other punch can possibly be used and it will punch quarter inch holes in half inch stock without any difficulty whatever. It is worth while to know more about this machine and dealers will do well to send for some very excellent reading matter that relates to this and others of the company's product. The goods are produced by Armstrong-Blum Mfg. Co., of 104-124 N. Francisco avenue, Chicago, Ill. In writing kindly mention THE AMERICAN ARTISAN.



Marvel Portable Punch.

ANOTHER CORTRIGHT PATENT.

Under this heading appears an article in the March issue of the Cortright Metal Shingle Advocate, issued by the Cortright Metal Roofing Co., of Philadelphia, that leaves no doubt as to the course this company intends to pursue in regard to the protection of its interests.

Apparently, from the tone of the article, they have proof that an attempt is being made to place on the market a shingle bearing a striking resemblance to the Cortright design, so in order to protect their customers from being deceived they announce that commencing with January 1st, 1908, every shingle turned out by them will bear the embossed stamp "Cortright" Reg. U. S. Pat. Off. on the first corrugation at the top of the shingle. There does not seem to be any excuse for infringement of designs, especially at this time when Architects, Contractors, Builders, and General Roofers are giving so much attention to metal shingle roofing. It would seem that every manufacturer would be anxious to get as far away from other designs as possible in order to have something distinctly different to offer those interested.

The Cortright Co. has repeatedly made the statement in the Advocate that they are not trying to compete with the cheap make of shingles.

"TWO GOOD LEVERS."

"Two Good Levers" is the title of a very neat leaflet which the Bassett-Presley Co., of 402-415 Western Reserve Building, Cleveland, O., has issued among others that call attention to its extensive assortment of roofers' supplies. The leaflet is in envelope size and is devoted to eaves trough and gutters, which two items are shown by illustrations in silver bronze print which nicely portrays the galvanized iron effect. These are the "Two Good Levers," in connection with which the company says "Our Galvanized Corrugated Round Expanding Conductor Pipe and our Galvanized Patent Slip Joint Eaves Trough are two good levers to help put your roofing and spouting departments upon a higher plane to do high class contract and repair work." These goods are in ten-foot lengths and are the longest made without cross seams. The company's Corrugated Conductor Pipe

is guaranteed not to burst even when frozen solid. Copies of this interesting leaflet and of other bright advertising matter by the company may be had upon application to the address above indicated. In writing kindly mention THE AMERICAN ARTISAN.

CLARK, QUIEN & MORSE.

Clark, Quien & Morse of Peoria, Ill., call special attention to Pleckers Corrugated Expanding Conductor Pipe, which as a special feature, they state, has no cross seams and is made of galvanized iron in ten foot lengths. It will be understood, of course, that these features add materially to the strength and durability of the conductor pipe in question, and it is, of course, quite well known that proper corrugated arrangement permits the necessary expansion of the pipe in situations where weather conditions tend to its often suddenly varying conditions of temperature. It is claimed for the Plecker Corrugated Expanding Conductor Pipe that it will not burst even when solidly full of ice. Clark, Quien & Morse call attention to this item as but an example of its extensive line of standards and specialties in the eaves trough and guttering line. Some good illustrations indicating a very large line of what are claimed as among the best goods made may be had upon application to the company. In writing kindly mention THE AMERICAN ARTISAN.

NOTES AND QUERIES.

WATER POWER WASHING MACHINES.

From Fred Dittman Hardware Co., La Crosse, Wis.

Kindly give us some names of manufacturers of water power washing machines?

Ans.—P. T. Coffield & Son, Dayton, O.; Pittsburg Motor Washer Co., 1230 Penn avenue, Pittsburg, Pa.

REVOLVING SIGNS.

From M. I. Owen, Waco, Tex.

Who makes revolving sheet iron signs?

Ans.—A. Klintz & Co., Jackson and Clinton street, Chicago, Ill.; B. F. Chase Sign Company, 128 5th avenue, Chicago.

"INDIAN" MOTOR CYCLE.

From W. E. Hartman, Argenta, Ill.

Will you please advise me who makes the "Indian" motor cycle?

Ans.—Hendee Mfg. Co., 1251 Michigan avenue, Chicago.

MICA.

From Mrs. O. N. Olson, R. F. D. No. 5, Box, 18, Hilflin, Ala.

Please give me the names of some large dealers in mica?

Ans.—Eugene Munsell & Company, 68 Church street, New York City, N. Y.; Chicago Mica Company, Valparaiso, Ind.

BRASS RINGS.

From Reiche Bros., Naperville, Ill.

Where can we get solid brass rings to put into top of concrete hitching posts?

Ans.—Acorn Brass Mfg. Company, 51 N. Peoria street, Chicago.

SHEET METAL HIGH CLOSETS.

From Richmond Stove Company, Richmond, Va.

Kindly advise us where we can get sheet metal high closets?

Ans.—Federal Steel Fixture Company, 497 W. Kinzie street, Chicago.

ADDRESS OF CLIPPER SHEAR COMPANY.

From A. P. Brunner, Ukiah, Cal.

Can you give me the address of the Clipper Shear Company, manufacturers of pruning shears?

Ans.—Clyde, Ohio.

ITEMS.

The mills of the Atlanta Sheet & Tinplate Company of Atlanta, Ind., which have been idle for a long time, have been put into operation.

The Cleveland Metal Roofing & Ceiling Co., of Cleveland, O., has been incorporated with a capitalization of $25,000. The company's address in Cleveland is 3105 Detroit avenue.

About half of the capacity of the tinplate mills of the American Sheet & Tinplate Company at Sharon, Pa., has been put into operation. Some of the company's new sheet mills have been started recently and the sheet capacity has increased to 44 per cent up to the present time.

It is stated that the present price for sheet copper is creating a great deal of interest among cornice makers and eaves trough and conductor pipe concerns, but it is argued that the instability of the market forbids the general utilization of the product without some sort of guarantee that present prices will be maintained.

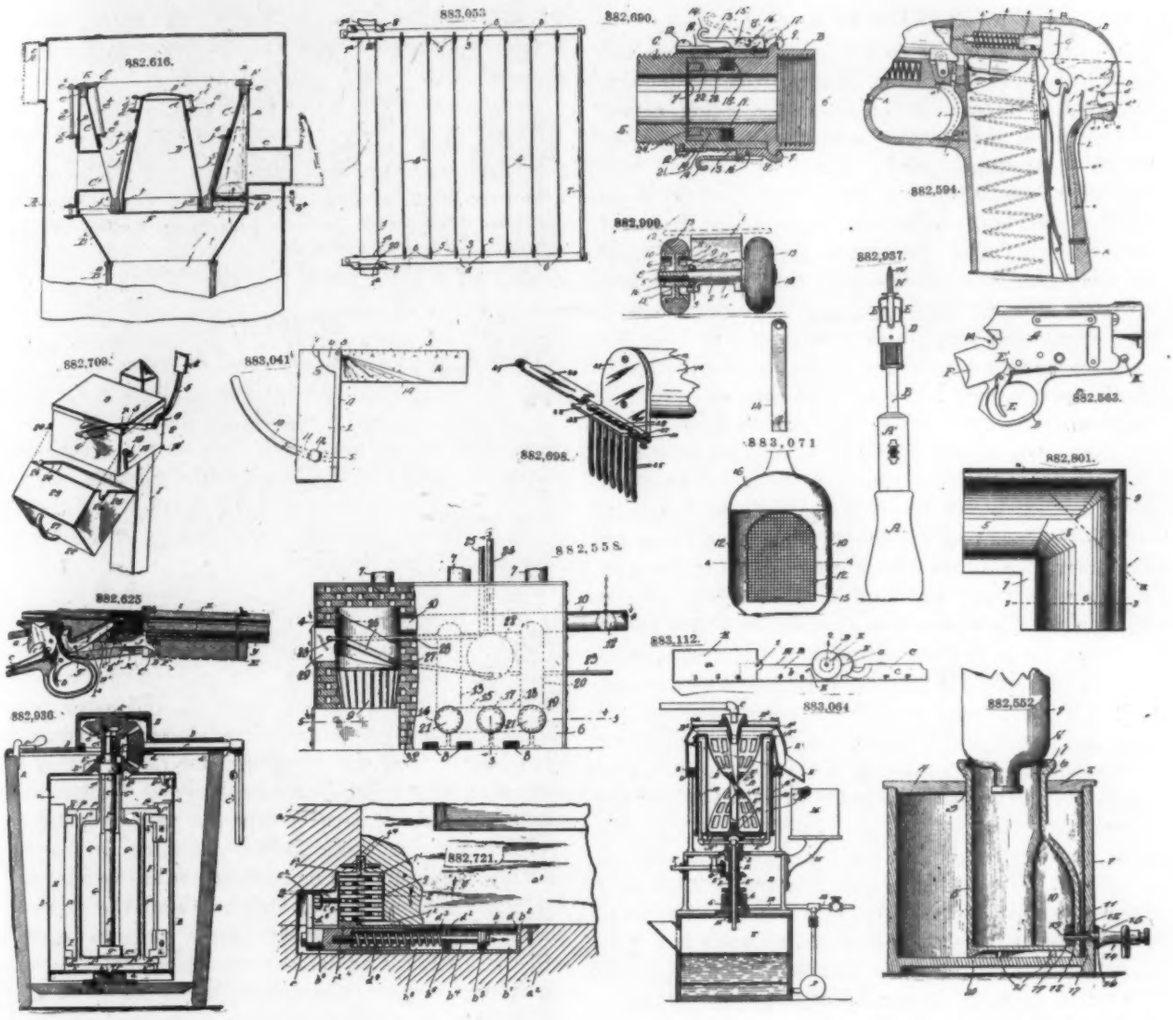
Largely no doubt inspired and encouraged by the very successful operation and accomplishment of the Master Sheet Metal Workers' Association of Brooklyn, N. Y., the matter of organizing the borough of Manhattan which includes New York City proper has been taken hold of with some vigor. Meetings have been held looking in the direction indicated and at a recent meeting of the Brooklyn Association the New York Sheet Metal Workers were invited to attend and did attend largely. A meeting looking strongly to establishment of the New York Society was held March 26th. A little question but what this splendid body of representatives will be found strongly in line and in represented form.

The Master Sheet Metal Workers' Association of Brooklyn, N. Y., held a meeting upon April 2nd at Jennings & Hankey Hall, 54 Hancock street, Brooklyn, on April 2nd. Prior to this meeting the Association distributed a stirring announcement to sheet metal workers of the region generally in which it stated its platform as follows:

"We are opposed to the manufacturers and jobbers selling direct to the consumers, and shall use all fair means to break up this practice, and we shall give our preference in buying to those houses which sell to the trade only. We shall use all the means possible within our power to educate our brother master to do work at a reasonable profit to himself by inaugurating a schedule of prices to govern work in our different localities. We favor the elimination of the restriction of apprenticeship believing that every boy in America should have the opportunity to learn a trade."

A number of good speakers were in attendance and the meeting was a very interesting one.

NEW PATENTS.



882,552—Water-cooler. Henry G. Cordley, Glenridge, N. J. Filed Dec. 19, 1906. Serials No. 348,630.

882,558—Air and Water Heating Furnace. Clarence A. Gibbs, Williamsport, Pa. Filed May 11, 1907. Serial No. 373,059.

882,563—Repeating Firearm. Lewis L. Hepburn, New Haven, Conn., assignor to the Marlin Firearms Company, New Haven, Conn., a corporation of Connecticut. Filed April 4, 1907. Serial No. 366,297.

882,594—Firearm. Henry H. Talbot, St. Joseph, Mo. Filed Oct. 30, 1906. Serial No. 341,298.

882,616—Furnace. Henry Bluhm and Joseph H. Regan, Boston, Mass. Filed May 20, 1907. Serial No. 374,593.

882,625—Magazine-rifle. John J. Catron, Bonham, Tex. Filed Aug. 13, 1907. Serial No. 388,324.

882,690—Hose-coupling. Theodore N. Jones, Boulder, Colo., assignor of one-half to John T. Powers, Hastings, Neb., and one-fourth to N. S. Shannon and one-fourth to W. H. Ferguson, Lincoln, Neb. Filed April 1, 1907. Serial No. 365,683.

882,698—Nail-pick-up Device. Edward Lahl, San Francisco, Cal. Filed May 13, 1907. Serial No. 373,462.

882,709—Mail-box. Willis W. Palmer, Jericho, Vt. Filed June 9, 1906. Serial No. 321,035.

882,721—Door-check. Joseph Soss, New York, N. Y. Filed April 8, 1907. Serial No. 367,074.

882,801—Sheet-metal Gutter. Sylvester D. Shoemaker, Grogan, Ohio. Filed July 19, 1907. Serial No. 384,562.

882,936—Ice-cream Freezer. Thomas J. Fegley, Philadelphia, Pa., assignor to North Brothers Manufacturing Company, Philadelphia, Pa., a corporation of Pennsylvania. Filed April 10, 1906. Serial No. 310,958.

882,937—Screw-eye Driver. Thomas J. Fegley, Philadelphia, Pa., assignor to North Bros. Mfg. Co., Philadelphia, Pa., a corporation of Pennsylvania. Filed Jan. 2, 1907. Serial No. 350,360.

882,999—Roller-skate. Emory H. Copenhaver and Walter Colvin, Dunlevy, Pa. Filed Dec. 18, 1907. Serial No. 407,039.

883,041—Try-square. James F. McCurdy, San Jose, Cal. Filed June 28, 1906, Serial No. 323,808. Renewed Sept. 6, 1907. Serial No. 391,700.

883,053—Clothes-drier. William Scully, Chicago, Ill. Filed April 20, 1907. Serial No. 369,270.

883,064—Ice-cream Freezer. Theodore L. Valerius, Fort Atkinson, Wis., assignor to The Creamery Package Mfg. Company, Chicago, Ill., a corporation of Illinois. Filed July 28, 1906. Serial No. 328,222.

883,071—Shovel and Scoop. Bartholomew Zimmel, New York, N. Y. Filed May 11, 1907. Serial No. 373,125.

883,112—Combined Carpenter's Tool. Bartholomew Jacob, New Rochelle, N. Y. Filed May 21, 1907. Serial No. 374,876.

Trade Report.

HARDWARE.

Three months of the current year have flown and it was these three months that the hardware jobbing trade had counted upon as being the trying period resulting from our recent condition of panic. As the first of these three months passed and its footings were taken, it was discovered that the month had been not at all bad and in fact was much better than had been expected. The end of the second month in its footings showed an increase over the first month and an even more gratifying condition of trade, and now that we have run into the early days of April, we begin to realize that nothing had happened and that business is pretty good after all and that we are still doing business at the old stand with the very best of prospects for a complete year of wonderful prosperity for 1908. We all know that everybody in the West and in the Northwest who is doing business or who is working for somebody else or who is carrying on some enterprise of his own has money and plenty of money and is ready to spend it. In this respect the condition of this territory never was in better shape and never can be in better shape than it is to-day. Why these people would never have known there was a panic if it had not been for the telegraphs and the newspapers. Will the hardware trade get it's share of this money? Of course it will, it cannot help getting it and the people who have the idea that we are going to have a slow year for 1908 and that we are going to have trouble in making ends meet are all out of line. The people of this Western country have grown too wise to be scared very hard or very long by anything in the shape of panics, and this is clearly proved by the fact that our late financial unpleasantness failed to break up the prices on any of the commodities in the hardware line. So we find prices after the panic just the same as prices before the panic and the most prosperous times. And prices have continued steady and are steady to-day, practically throughout the entire hardware trade. We find wire products particularly active at the present time with a steadily increasing volume of business being done. Wire nails continue at $2.23, painted barb wire, $2.38; galvanized barb wire, $2.68; smooth annealed wire, $2.08; smooth galvanized wire, $2.38; polished staples, $2.23; galvanized staples, $2.63. The foregoing prices are for car lots to jobbers; for car lots to retailers add 5c and for less than car lots to retails add 15c.

TIN PLATE.

The tin plate market is gradually getting into better shape. Orders are coming in more freely, and plants are gradually resuming. Business at present is mainly routine, but manufacturers are optimistic over the outlook. Prices are, 100-pound coke plates, $3.70 at Pittsburg mills, with the independents quoting $3.65. Price f. o. b. Swansea for the plate is 12s 6d. Arrivals of tin plate for the week ending March 21 were 15,576 boxes at New York. Stock of tin plates at Swansea on March 12 were 143,839 boxes, as compared with 113,276 boxes at the same time last year.

For prompt shipment, f. o. b. mill—

Coke, tins, 14x20, I. C.	3.85@3.90
Coke, tins, 14x20, 100 lbs.	3.70@3.75
Coke tins, 14x20, 95 lbs.	3.65@3.70
Coke tins, 14x20, 90 lbs.	3.60@3.65
Charcoal, terne, 20x28, I. C.	7.30@7.35
Charcoal, terne, 20x28, 200 lbs.	7.00@7.05

Usual differences for odd sizes and weights

COPPER.

The surplus stocks of the metal in this country have been reduced through good buying during the past month, and the heavy exports to Europe, which are more than 21,000 tons, that there is not much spot copper in sight, and the amount in the hands of producers for delivery during April is not large. Some of the producing interests report having no copper to offer before June delivery.

Reports from the various brass manufacturers and electrical concerns indicate a slowly growing volume of orders for finished material. While their order books for future delivery are comparatively bare, there is a good day-to-day business, and every prospect of its steady increase. The electrical companies have been helped out by orders for power transmission equipment, both for domestic and foreign consumption, and the large companies are gradually increasing their working forces. Nothing in the way of large purchases can be expected from the railroads for some time to come, and not until the work of electrification of lines begins again on a large scale will the electrical equipment manufacturers return to the normal output. Casting copper is the weakest of all grades, and the demand is comparatively slow. Prices on the New York Metal Exchange were easier during the week, being ⅛c lower in the bid, to 13@13⅜c for lake, 13@13¼c for electrolytic and 12¾@13c for casting copper.

Extreme fluctuations for the year:

	Highest.	Lowest.
Electrolytic copper, spot	13¾	12¼
Lake copper, spot	13⅞	12⅜
Casting copper, spot	13½	12⅛

SHEETS.

There is reported some shading of sheet prices by small independent mills, but we are unable to learn that such action, if it has really taken place, has affected the sheet market in any particular. The sheet market may be said to be quiet at the present time, but the outlook for the future is thoroughly good and the demand for sheets both in black and galvanized is steadily but slowly increasing. Additional mills are being put into work each week until there is said to be 47 per cent of the sheet capacity active at the present time, as against 46 per cent a week ago and 44 per cent two weeks ago. Outside of the few scattering reports of shaded prices by inde-

pendent mills, sheet prices may be said to be continuing firm. Advance specifications for use in building work later on are coming in with some freedom, and it is expected that before spring is well along all the mills will be running up to their full capacities.

The following prices are for 500-bundle lots and over, f. o. b. mill:

Gauge.	Net.	—Galvanized— Net.	List.
No. 30	2.75	4.05	21
No. 39	2.65	3.80	19
No. 28	2.50	3.65	17
No. 27	2.40	3.35	16
Nos. 25 to 26	2.35	3.15	15
Nos. 22 to 24	2.30	2.95	14

SHEET ZINC.

Business in sheet zinc continues of small proportions. Consumers are taking nothing beyond actual requirements for immediate use, and trading is mainly routine in character. Prices are steady on the basis of $7.00 per 100 pounds f. o. b. smelter.

SPELTER.

The spelter market is easy with a small demand from consumers who are more inclined to meet sellers' views. Immediate shipments from the West were held at $4.60@4.70, and futures at $4.50@4.60 f. o. b. New York. The St. Louis market was weak, with sales of 200 tons at $4.55, and 100 tons at $4.52½ reported. The London market was steady at £21 2s 6d.

Extreme fluctuations for this year:

	Highest.	Lowest.
Spot, New York	4.80c	4.32½
Spot, London	£22 0 0	£19 17 6

ALUMINUM.

Trading in aluminum is more or less of a routine character, with business of small proportions. Prices are easy. No. 1 ingots for remelting are offered at 33@34c per pound in ton lots, and No. 2 ingots at 31@32c in car lots for 90 per cent pure.

COKE.

The coke market continues to present a quiet appearance. There is a total absence of large contracts, in view of the restricted blast furnace production. Business is mainly in carload lots for immediate shipment. Prices are easy and not well maintained. Quotations are easy at $2.25@2.50 for good grades of 72-hour Connellsville foundry for both spot and futures delivery, while furnace is about on the basis of $1.75 @2.00 for spot and future delivery.

PIG IRON.

The local Pig Iron market has shown some signs of activity during the week, but the lack of any general buying movement leaves iron affairs in pretty much the same condition as they were left this time a week ago. There are reported here two sales each of 500 tons of Southern iron and another of 300 tons, and in this connection it is stated that these buyers have succeeded in making the price at $12 flat Birmingham. Picking up one month after another and filling in its aggregates, the Pig Iron market finds itself in not so desperate a situation after all as the aggregates for several months past have footed up wonderfully well, taking all things into consideration. It is true that there is an apparent change in the method of small smelters conducting their iron buying affairs and the lack of bulk orders it may be said is at the present time largely due to this change in buying methods. Current markets are as follows:

CHICAGO MARKET.

Lake Superior Charcoal	$21.50@22.00
Northern Foundry No. 1	17.85@18.35
Northern Foundry No. 2	17.35@17.85
Northern Foundry No. 3	16.85@17.35
Southern Foundry No. 1	16.85@17.35
Southern Foundry No. 2	16.35@16.85
Southern Foundry No. 3	15.85@16.35
Southern Foundry No. 4	15.35@15.85
Southern No. 1 Soft	16.85@17.35
Southern No. 2 Soft	16.35@16.85
Southern Gray Forge	15.35@15.85
Southern Mottled	15.10@15.60

PITTSBURG MARKET.

No. 2 Foundry	$16.15@16.65
Gray Forge	15.40@15.65
Bessemer	17.90
Basic	16.40
Malleable	16.90@17.15
Southern No. 2	16.90@17.40
Southern Forge	15.15@15.40

BIRMINGHAM MARKET.

No. 1 Foundry	$13.00@14.00
No. 1 Soft	13.00@14.00
No. 2 Foundry	12.00@12.50
No. 2 Soft	12.00@12.50
Gray Forge	11.25

Rogers, Brown & Co., Cincinnati, will say in their weekly report: "The line of small orders for prompt shipment is as much in evidence as it has been. Some inquiries are for larger tonnage and in a few instances the deliveries specified are quite extended, all of which is encouraging.

"A canvas of one of the largest consuming centers in the northwest shows a material gain over a month ago, which has been very gradual but steady and promises to continue. Some branches, particularly those depending largely on railroad and trolley line equipment, are yet almost at a standstill, but most others report better.

"Stocks on consumers' yards are being gradually decreased, which has called for the resumption of shipments on contracts already in existence.

"Coke is without appreciable change. The demand is slight and production is meeting current needs. There is very little business under offer and the inquiry is at a minimum. The best brands are now at absolute bargain figures."

Matthew Addy & Company, Cincinnati, will say in their weekly report: "Some concerns in the iron trade are busy, some are not so busy and some are not busy at all. Generally speaking, things are exceedingly irregular. We have been making an attempt to find out what proportion of iron is now being melted compared to the amount melted in really good times. It has been quite impossible to fix any figures that are at all accurate. Apparently, however, as much iron is being melted to-day as is being made. But one thing is very certain, and that is that we have struck one of the dull, gray, monotonous periods in the business when nothing eventful occurs. For a month we have not gone down hill, nor have we gone up hill. We have simply been staying where we were and holding our ground.

"It is a noticeable fact, however, that the whole trade, in spite of the long period that we have had of comparative quiet, is full of a spirit of optimism. Both consumers and producers feel more cheerful and view the outlook hopefully, and it is confidently expected with the coming of spring that this happier feeling will bear fruit in a real improvement in business."

Current Hardware and Metal Prices.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly.

METALS.

FIRST QUALITY BRIGHT PLATES.

		Per Box.
IC	14x20	$6 40
IX	14x20	7 45
IXX	14x20	8 60
IXXX	14x20	9 85
IXXXX	14x20	11 00
IC	20x28	13 70
IX	20x28	15 70
IXX	20x28	18 15
IXXX	20x28	20 55
IXXXX	20x28	22 95

COKE PLATES.

Cokes, 180 lbs	IC	20x28	$ 8 50
Cokes, 200 lbs	IC	20x28	9 00
Cokes, 216 lbs	IC	20x28	9 50
Cokes, 270 lbs	IX	20x28	11 25

PIG IRON.

North'n Fdy., No. 1	$17 85@$18 35
North'n Fdy., No. 2	17 35@ 17 85
North'n Fdy., No. 3	16 85@ 17 35
Southern Fdy., No. 1	16 85@ 17 35
Southern Fdy., No. 2	16 35@ 16 85
Southern Fdy., No. 3	16 85@ 16 35
Southern Fdy., No. 4	15 35@ 15 85
Southern No. 1 Soft	16 85@ 17 35
Southern No. 2 Soft	16 35@ 16 85
Southern Gray Forge	15 35@ 15 85
Southern Mottled	15 10@ 15 60
Lake Sup. Charcoal	21 50@ 22 00
Southern Silveries, 4% Silicon	18 85@ 19 35
Southern Silveries, 5% Silicon	19 35@ 19 85
Southern Silveries, 6% Silicon	20 35@ 20 85
Jackson Co. Silveries, 6 per cent	21 90@ 22 40
Jackson Co. Silveries, 8 per cent	23 90@ 24 40
Jackson Co. Silveries, 10 per cent	25 90@ 26 40
Malleable Bessemer	18 00@ 18 50
Standard Bessemer	19 40@ 19 90
Alabama Basic	17 35@ 17 85

BLACK STEEL SHEETS.

Nos. 11-12	per 100 lbs.	$2 60
Nos. 13-14	per 100 lbs.	2 65
Nos. 15-16	per 100 lbs.	2 70
Nos. 17-21	per 100 lbs.	2 75
Nos. 22-24	per 100 lbs.	2 80
Nos. 25-26	per 100 lbs.	2 85
No 27	per 100 lbs	2 90
No 28	per 100 lbs.	3 00

GALVANIZED

No. 10	per 100 lbs.	$2 25
Nos. 12-14	per 100 lbs.	2 45
No. 16	per 100 lbs.	2 65
Nos. 17-21	per 100 lbs.	2 85
Nos. 22-24	per 100 lbs.	3 05
Nos. 25-26	per 100 lbs.	3 25
No. 27	per 100 lbs.	3 45
No. 28	per 100 lbs.	3 65

POLISHED SHEET STEEL.

No. 24	per 100 lbs	$4 90
No. 26	per 100 lbs.	5 00
No. 27	per 100 lbs.	5 10
No. 28	per 100 lbs.	5 20

SMOOTH STEEL.

Wood's Smooth, No. 20		$3 05
" "	No. 22-24	3 10
" "	No. 25-26	3 15
" "	No. 27	3 20
" "	No. 28	3 30

PATENT PLANISHED SHEET IRON.

Patent Planished Sheet Iron, ..."A" $10.20, "B" $9 20

PATENT PLANISHED SHEET STEEL.

Dickey Planished Sheet Steel.....8½c

SOLDER.

XXX Guaranteed ½ & ½	per lb.	18 c
Commercial ½ & ½	per lb.	17½c
No. 1 Plumbers		15½c

SHEET ZINC.

500 lb. Casks	case, per cwt.	$7 50
300 lb. Casks	per cwt.	7 50
Sheets	per cwt.	7 50

COPPER.

Copper sheet, 100 lbs. over, base...20c

TIN PIGS AND BARS.

Banca, pigs, per lb	29 c
Straights, pigs, per lb	29 c
Straights in bars, per lb	33 c

LEAD.

American Pig	4 c
Bar	4 c
National (White) brands (in less than 100 lb lots), per lb	8½c
Sheet.	
Full coils	per 100 lbs. $9 00
Cut coils	per 100 lbs. 9 50

HARDWARE.

ADZES.

Carpenters'.
Plumbs.....40%

Coopers'.
Barton's.....20%
White's.....15%

Railroad
Plumbs.....40%

Ship.
Plumbs.....40%
White's.....12½%

AMMUNITION.

Caps, Percussion—per 1,000.

F. L Waterproof, 1-10s	40c
G D	35c
Musket	60c

Shells, Loaded—
Loaded with Black Powder....40%
Loaded with Smokeless Powder, medium grade.....40 & 5%
Loaded with Smokeless Powder, high grade.....40 & 10 & 10%

Union Metallic Cartridge Co.:
New Club, Black Powders.....40%
Nitro Club, Smokeless Powders, ...40 & 5%
Arrow, Smokeless Powders.... .....40 & 10 & 10%

Winchester:
Smokeless Repeater Grade..40 & 5%
Smokeless Leader Grade.40&10&10%
Black Powder.....40%

Gun Wads—per 1,000.
Winchester Gun Wads.....15%

Powder.		Each.
DuPont's Sporting, kegs		$ 50
" "	½ kegs	2 50
" "	¼ kegs	1 40
Dupont's Sm'k'less	50-lb. drum	22 45
" "	25-lb. kegs	11 30
" "	12½-lb. kegs	5 80
" "	6¼-lb. kegs	2 97
"	1-lb. cans	15

Shot.

Drop shot, sizes smaller than B, 25-lb. bags, per bag	1 95
Drop shot, B and larger sizes, 25-lb. bags, per bag	2 20
Buck Shot, 25-lb. bags, per bag	2 20
Chilled Shot, 25-lb. bags, "	2 20

ANCHORS

Expansion Screw Anchors.....10%

ANVILS

Trenton, 70 to 80 lbs.....9½c per lb
Trenton, 81 to 150 lbs.....9½c per lb

ASBESTOS.

Board and Paper.....25%

AUGURS.

Boring Machine.....70%
Irwin's.....40&10%
Carpenter's Nut.....70%
Hollow.
Bonney's—list $30.00.....75&5%.
Stearns, No. 3.....36 00
Post Hole.
Digwell, 8-inch.....per doz. 12 50
Iwan's Post Hole and Well.. 40%
Vaughan's, 4 to 9-in., per doz. 6 25
Rafting.
Snell's.....50&5%
Ship.
Ford's, with or wi'out screw.40-12½%
Snell's " " " 40-5%

AWLS.

Brad.		
No. 3 Handled	per doz.	$0 40
No. 1050 Handled	"	80
Shouldered, assorted, 1 to 4,	per gro.	$1 20
Patent asst'd, 1 to 4	"	85
Harness.		
Common	"	95
Patent	"	90
Peg.		
Shouldered	"	1 20
Patent	"	60
Scratch.		
No 1 handled	"	4 80
No. 15, socket handled	per doz.	1 25
No. 7 Stanley		1 80
Sewing.		
Common	per gro.	·90
Patent	"	90

AXES.

Boy's Handled.
Lippincott, 3 lb.....per doz. $6 00
Falls City..... " 6 00
Broad.
Plumbs, West, Pat..... 33⅓%
" Can. Pat..... 40%
" Firemen's (handled). .....per doz $1, 75
Plumbs, Miners' (handled) " 6 75
Single Bitted (handled)
Gladiator . 3 to 4 lbs , per doz $11 00
Flint Edge " " " 9 25
Standard .. " " " 9 25
Elec Chopper, Forest Clipper 10 50
Perfect Premier " " 10 00
Crown " " 7 00
Single Bitted (without handles)
Gladiator...3 to 4 lbs. per doz. $8 50
Flint Edge. " " 7 00
Standard... " " 7 00
Electric Chopper" " 8 25
Perfect..... " " 7 75
Crown..... " " 5 25
Double Bitted (without handles).
Gladiator...3 to 4 lbs. per doz. 11 50
Flint Edge. " " 9 75
Perfect..... " " 11 00
The above prices on axes of 3 to 4 lbs. are the base prices.
3½ to 4½ lbs. advance 25c
4 to 4½ lbs. advance 50c.
4½ to 5½ lbs. advance 75c.

BAGS, PAPER NAIL.

Pounds	10	16	20	25
Per 1,000	$2.50	3.75	4.50	5.00

BALANCES, SPRING.

Frary's.....40%
Pelouze.....20%

BARS, CROW.

Pinch or Wedge Point..per cwt. $3 75

BASKETS.

Clothes.		
Small Willow	per doz.	$7 00
Medium "	"	8 75
Large "	"	10 50
Galvanized Iron.	½ bu.	1 bu. 1½ bu.
Per doz	$4 75	6 50 8 00

BEATERS.

Carpet.	Per doz.
No. 10 Coppered Spring Wire.	$0 90
No. 12 Spring Wire	1 10
No. 10 Preston	1 10
Egg.	Per doz.
No. 50 Imp. Dover	$0 75
No. 102 " " tinned	85
No. 150 " " hotel	1 40
No. 10 Heavy hotel tinned	2 10
No. 13 " " "	3 30
No. 15 " " "	3 60
No. 18 " " "	4 20

BELLOWS.

Blacksmiths'.....65%
Hand.
8-inch.....per doz. $8 50
10-inch..... " 10 50
Moulders'.
12-inch..... " 12 50

BELLS.

Call.
3-inch Nickeled Rotary Bell, Bronzed base.....per doz. $5 00
Cow.
High Grade.....60%
Kentucky.....65&10%
Door. Per doz.
New Departure Automatic... $6 00
Rotary.
3 -in. Old Copper Bell..... 4 00
3 -in. Old Copper Bell, fancy.. 6 00
3 -in. Nickeled Steel Bell..... 4 50
3½-in. Nickeled Steel Bell..... 5 00
Hand.
Hand Bells, polished.....50&5%
White Metal.....40%
Nickel Plated.....30%
Swiss.....40&33⅓%
Silver Chime.....33⅓%
Miscellaneous.
Church and School, steel alloy..50%
Farm, lbs..... 40 50 75 100
Each.....$1.25 1.60 2.35 2.85

BEVELS, TEE

Stanley's, rosewood handle, new list.....25%
Stanley's iron handle.....25%

BINDING, OILCLOTH.

Zinc.....80%
Brass.....70&10%
Brass plated.....75&5%

BITS.

Auger.
Extra Double Spur.....70&10%
Ford's Car and Machine....40&10%
Triumph.....50&5%
Ford's Ship.....40&10%
Irwin.....50%
Russell Jenning's.....25&10%
Clark's Expansive.....60%
Steer's " Small list, $22.00..25%
" " Large " $26.00 .25%
Irwin Car 45%
Ford's Ship Auger pattern Car.....40&10%
Center.....40&10%
Countersink.
No. 18 Wheeler's.....per doz. $1 25
No. 20 " " " 1 75
American Snail head.. " 75
" Rose " .. " 90
" Flat..... " 75
Mayhew's Flat..... " 1 25
" Snail..... " 1 25
Dowell
New Jennings.....40&10%
Gimlet.
Standard Double Cut.....60%
German Pattern.....per doz. $0 60
German..... " 65
Gouge..... " 80
Spoon..... " 80
Countersink..... " 1 00
Reamer.
Jenning's Square..... " 2 50
Standard Square..... " 75
German Octagon..... " 75
Screw Driver.
No. 7 Commoc..... " 50
No. 1 Triumph..... " 1 25
No. 2 " ..... " 1 —
No. 340 Shepardson's. " — —
No. 1 Smith's..... " — —

BLACKING, STOVE. (See Polish).

BLADES, SAW.

Butchers'.
Standard, ¾ & 1¼-in.....40%
Clock Spring.....40%
Star.....15%
Coil.....each, $1 50
Hack.
Disston's.....25&5%
Flexible.....33⅓&5%
Star.....20&5%
Wood.
Jackson's.....per doz. $2 25
Disston's—No. 6, 16, 26 & 045.. 4 25
Triumph..... 3 50
Forest Clipper..... 3 00

BLOCKS.

Snatch.
Wooden.....60&10%
Steel.....50%
Tackle.
Iron Strapped.....70%
Com. Steel.....60%

BOARDS. (New List)

Stove.....50&10%
Wash.
Globe, single.....per doz. $2 50
Globe, double..... " 3 35
Peace Maker..... " 3 00
Crystal Glass..... " 4 00
Brass King..... " 4 00
Nickel Plate..... " 4 15

BOBS, PLUMB.

Carpenters'.
No. 2, iron.....per doz. $0 65
No. 00, " ..... " 1 36
No. 0, " ..... " 1 80
No. 3, lead..... " 2 90
No. 4, " ..... " 3 40
No. 113, brass plated.. " 1 10
No. N30, nickel plat'd. " 1 30
No. N31, " " " 1 85

BOLTS.

Carriage, Machine, etc.
Carriage, ⅜x6 and sizes smaller and shorter.....70&10%
Carriage, sizes larger and longer than ⅜x6.....60&5%
Machine, ⅜x4 add sizes smaller and shorter.....70&10%
Machine, sizes larger and longer than ⅜x⅜x4.....60&5%
Elevator.....50-10&5%
Plow.....60&10%
Stove.....80&10%
Tire.....75%
Wagon Box Strap.....70%
Mortis, Door.
Gem, iron.....60%
Gem, bronze plated.....20%
Barrel.
Cast.....60%
Wrought.....
Wrought, bronzed.....50%
Flush.
Wrought.....50&10%
Spring.
Wrought.....
Wrought, heavy.....
Square.
Cast.....50&10%
Wrought.....

BORERS.

Angular.
Miller's Falls.....per doz. $13 00
Bung.
Doz.
Enterprise Mfg. Co 's No 1... $14 00
" " " No 2.. 18 50

BOXES

Mail, No..... 1 2 10
Per doz.....$3.50 5.00 17.50
Miter.
New Langdon.....15&5%
Stanley's.....30%
Seavey's.....each, $1 50

BRACES.

Barber's.....50&10&10@50&10&15%
Fray's Genuine Spofford's.....60%
" Nos. 66 to 146.....50%
" No. 0108..... $3 50
" No. 08..... 2 75
" No. 010..... 2 85

BRACKETS.

Hay-Rack.
Wenzelmann's No. 1, per doz. $9 00
" No. 2, " 9 60
Shelf.
Cast Iron, bronzed.....50-10&5%
Clover Wrought Steel.....70&10%
Clover Folding.....70%

BROILERS.

Wire.....70%
No. Cwron, Self-basting, 80dos .. $2 50

BUCKETS.

Pump, Rubber.
Wychoff.....per gro. $4 75
Cooper..... " 4 75
Champion..... " 7 50
Victor..... " 9 25
Star..... " 5 00
IXL..... " 6 75
Well.
Galv'd Qts..... 10 12 14
Per doz.....$2.90 $3.25 $3.40
Wooden, top ear, plain, per doz. 4 00
" " swivel, " 5 10

BUCKS, SAW.

Folding.....per doz. $2 10

BURRS, RIVETING.

Copper Burrs only.....30%
Tinners' Iron Burrs only.....65&5%

BUTTS.

Cast Iron.....70&5%.
Wrought Brass (New List).....40%
Wrought Steel, Bright.
Wrought Steel, Japanned.
Nos. 731 and - .....70&10%

CALIPERS.

Double.....65&5%
Inside and Outside.....65&5%
Wing.....70%

CALKS.

Logger's Boot.
(Lufkin R. Co.'s), per M..... $3 75
Toe.
Shoenberger.....per lb 5 c
Bessemer..... " 4½c
American..... " 7 c
Swedes..... " 8½c

CANS.

Cheese Factory.
Ontario Pattern.
Gallons..... 20 30 40
Each..... $4.25 $5.00 $6.25
Milk.
Holstein.
Nos..... 300 301 302
Gals..... 5 8 10
Per doz.....$26.00 $27.00 $29.00
Chicago Pattern.
Nos..... 105 108 110
Per doz.....$19.00 $21.50 $23.00
Iowa Pattern.
Nos..... 408 410
Per doz..... $23.50 $24.50
New Elgin Pattern.
Nos 705 708 710
Per doz.....$25.00 $27.00 $28.00
Burn Pattern
Nos..... 700 701
Gals..... 8 10
Price..... $2.40 $2.65

CAN OPENERS.

See Openers.

CAPS, GUN.

See Ammunition.

CARPET STRETCHERS.

See Stretchers.

CARRIERS.

Hay.
Diamond, Regular.....each, $3 85
Diamond, Sling..... " 6 50
Myers' Imperial ..... " 3 85
Myers' Clover Leaf..... " 4 00

CARTRIDGES.

See Ammunition.

CASTERS.

Standard—Ball Bearing.....50&10%
Bed.....60&5%
Common Plate.
Brass Wheel.....60&10%
Iron and porcelain wheels, new list.....60&5%
Philadelphia Plate, new list.....70%
Martin's.....60%
Payson's.....75&10%

CATCHERS, GRASS.

Carroll's, No. C.....per doz. $4 25
Wildermuth's,.
Nos..... 1 2 3
Per doz.....$5.60 $5.75 $6.25
Nos..... 4 5 6
Per doz.....$6.75 $9.50 $10.00

CHAIN AND CHAINS.

Breast Chains.
Doubleslack.....doz. pairs, $5 75
With Covert Snaps. " 5 00
With Slide..... " 3 25
Without Slide..... " 2 85
Bright Ox Chains.
½-in. $7.25; ⅝-in. $5.45 per 100 lbs.

Cable Coil Chain.
Inch..... 5/16 ½ 7/16 ⅝
Per 100 lbs.$10.80 $8.00 $7.00 $6.20
Inch..... 7/16 ½ ⅝ ¾
Per 100 lbs.$6.00 $5.90 $5.75 $5.65
Inch..... ½ 1 1¼
Per 100 lbs.....$5.55 $5.55 $5.65
Cable Log Chain.
Advance 25c per 100 lb. on Cable Coil.
Cow Tie Chains.
American, 2 toggle.....50&5%
" toggle and snap...50&5%
" open and closed ring.....50&5%
Halter Chains.
American, new list.....33⅓%
German.....60%
Niagara, new list 40%
Brown's, " 40%
Picture Chains.
Light Brass, 3 ft.....per doz. $0 65
Heavy Brass, 3 ft .... " 1 00
Pump Chain
Galvanized, per 100 lbs.....$5 50
Safety Chain.
Brass.....60%
Special Steel Loading Chain.
Inch..... ½ 9/16 5/8
Per 100 lbs.....$16.00 $13.50 $12.50
Stretcher Chains.
5/16-in. $8.50; ½-in. $7.75 per 100 lbs.
Tie-Out Chains.
Brown's.....70&5%
Trace Chains.
Western Standard.
6½— 6-2.....per pair 30c
6½— 8-2..... " 34c
6½— 8-3..... " 33c
6½—10-2..... " 38c
7 — 8-2..... " 38c
7 —10-2..... " 42c
7 —10-1..... " 48c
7 —10-0..... " 60c
Add 2c per pair for Hooks.
Add 2c " for Twist Link.
Wagon Stay Chains.
Inch..... ½ 9/16 ⅝
Per 100 lbs.....$6.50 $6.00 $5.50

CHALK, CARPENTERS'.

Blue.....per gro. 75c
Red..... " 65c
White..... " 55c
Common White School Crayon..... " 8c

CHARCOAL.

In bags.....per bag 90c

CHECKS, DOOR.

Blount.....33⅓%
Sargent's.....33⅓%

CHIMNEY TOPS.

Iwan's Volcano.....50%

CHISELS.

Box.
Inches..... 10 12 14
Round per doz....$2.10 $2.25 $2.75
Flat " ... 2.85 3.60 4.20
Cold.
Good quality, ⅝ in. and larger.....per lb. .12c
Smaller size per doz.....
Socket, Framing and Firmer.
Clover.....75&10%
Tanged, Firmer.
With handles.....30&5%
Choppers, See *Cutters, Meat.*

CHUCKS, DRILL.

Goodell's, for Goodell's Screw Drivers.....per doz. $6 25
Yankee, for Yankee Screw Drivers..... 5 00

CHURNS.

Anti-Bent Wood,
Gal..... 5 7 10
Each.....$3.90 $4.60 $4.85
Belle, Barrel.....65&7½%
Common Dash, Gal. 4 5 6
Per doz..... $7.75 $8.50 $10.50
Union, Gal..... 5 7 10
Each.....$3.65 $3.90 $4.75

CLAMPS.

Adjustable.
Martin's.....30%
Carpenters'.
Steel Bar.....25%
Hose.
Sherman's, brass, ¾-in., per doz.. 42c
Double, brass, ¾-in., " 90c
Saw Filers.
Disston's list, $30.00.....30%
Stearns', No. 0, $3.50; No. 1, $11.50; No. 3, $5.00 doz.
Wentworth's, No. 1, $6.00; No. 3 $7.50.

CLAWS, TACK.

Cast, wood hdle..... per doz.45@60c
Forged steel, wood hdle " $0.50
Solid steel..... " 1 00
Giant..... " 50

CLEANERS.

Drain.
Iwan's Adjustable.....55%
Iwan's Stationary,.....40&5%
Pot.
Wire.....per doz. $0 55
Side-Walk.
Steel.....per doz. $3 25
XLCR .....65&5%

CLEAVERS

Family.
Griffin, Inch..... 6 7 8
Per doz.....$5.50 $5.75 $6.25
Royal.....per doz. 2 25
Butchers.
Plumbs.....25%

CLEVISES

Malleable.....5½c lb.

CLIPPERS.

Bolt.....$1.90@4.75

CLIPS.

Axle.....65&5%
Damper.
Standard.....per doz. 65c
Troy..... " 38c
Hame..... " 17

CLOTH.

Emery.
Star.....50%
B. & A.....50%
Hardware Wire—full rolls (100 ft.)
2 to 3 incl., Galv.—in full roll... 2 75
4 and 5..... " .. 3 00
6..... " .. 3 25
7 and 8..... " .. 3 75
Screen Wire.
12 mesh, painted, per 100 sq. ft.. 1 35

COCKS AND FAUCETS.

Compression Plain Bibbs...60, 10&5%
Lever Bibb Cocks.....60, 10&5%
Compression Hose Bibbs ..50—10&5%
Telegraph Faucets (new list)..50—5%
Racking Cocks (new list)...60, 10&5%
Compression Lock C'ks(new list).70%
Andrew's Brass Faucets.....70%
Angle Plug Faucets, per doz....$0 85
Milk Can Faucets, per doz..$2.60-4.20
Petroleum Faucets .....75&5%

COLLARS, STOVE PIPE.

Inches..... 5 6 7
Plain Tin..per gro.$1.90 $2.40 $3.50
Japanned Tin " 3.00 3.00 4.25
Lacquered Brass" 3.00 5.50 4.25

COMBS, CURRY.

Nos... 000 11 15 30 80 108
Per
Doz..$.37 .60 1.90 .90 1.15 .80
Nos... 290 320 390 532 620 1400
Per
Doz.$1.05 .85 1.35 1.20 .75 1.40

COMPASSES.

Carpenters'.....60—10—10%
Pencil—Faber's.....per doz. $1.00

COPPER—See Metals.

COPPERS.

Soldering.
1 lb.....per lb 30c
1½ lb.....31c 2 lb... " 29c
3 lb and larger..... " 26c

CORD.

Picture
White Wire (new list) .....85&10%
Sash.
Monarch Braided Flax ...per lb
Silver Lake. white. 7-32 in. "
Silver Lake, white, 8-32 in. "
Keystone.....8-32 in. " 29c

CORKSCREWS.

Humason & Beckley.....33⅓%
Walker's.....33⅓%
Williamson's Regular.....40&10%
Williamson's Forged Worm.....50%

COTTERS, SPRING.

All sizes—new list.....90&30%

COUPLINGS, HOSE.

Brass.....per doz. $
Brass Plated..... " 85

COVERS, WAGON—See Tents.

CRADLES, GRAIN.

Morgan's Grapevine....per doz.$22 75

CRAYONS—See Chalk.

CROW BARS.

Inch or Wedge Point.....per lb 3½c

CUTTERS.

Glass.
Red Devil.....45%
Smith & Hemenway Co.....50%
Woodward.....40%
Meat.
Enterprise, Nos. 5, 10, 12, 22, 32 and 42.....25%
No. 202. list, $1.50 ea.....40&7½%
Pipe.
Stanwoods. No.... 1 2 3
Each.....$0.85 $1.50 $4.00
Slaw and Crout.
3-knife Crout.....per doz. $9 75
1-knife Slaw..... " 1 65
2-knife Slaw..... " 2 25
Washer..... " 7 75

DAMPERS, STOVE PIPE.

Jewel.....50&10%
American.....50%

DIES AND STOCKS.

Discount.....40%
King's, Little Giant.....33⅓%

DIGGERS.

Post Hole.
Acme.....per doz. $9 25
Atlas..... " 9 00
Eureka..... " 7 50
Hercules..... " 10 25
Iwan's Split Handle.. " 7 50
Iwan's Perfection.... " 9 00
Iwan's Hercules pattern " 10 00
Ryan's..... " 17 00
See also Augers—Post Hole.
Dividers, Wing.....65&10%

DOOR CHECKS—See Door.

DOORS, SCREEN.

⅞ in. 4-panel, painted...per doz. $7 93
1⅛ in. 4-panel, painted... " 9 50
1⅛ in. 3-panel, natural pine, fancy..... " 12 40

DOOR HANGERS—See Hangers.

DRILLS.

Bit Stock.....60&10%
Blacksmith's Twist.....60%
Breast.
Fray's No. 9.....each, $1 75
Millers Falls No. 12..... " 2 10
Hand.
Goodell's Automatic.
Nos..... 01 03 3 20
Per doz.. $7.75 $12 50 $12.50 $11.00
Goodell's Single Gear. per doz. 15 75
Millers' Falls " " " 12 75
" " Double " " 15 25
Reciprocating.
Goodell's.....per doz. 16 50
Bit Stock.
Standard List..60&5%@60%@10

DRIVERS, SCREW.

Standard.....65&10%
Lock Ferrule.....60%
Champion.....40&10%
Champion Pattern.....70%
Clark's Interchangeable.....30%
Edison.....60%
Reed's Lightning.....45&5%
Goodell's Spiral.....,.50, 10, 5&2½%
Yankee Ratchet 50%
" " Spiral.....50&10%
Smith & Hemenway Co.....40&5%

EAVES TROUGH, GALVANIZED.

Terms, 2% for cash. Factory shipments generally delivered.

See also conductor pipe and elbows.

EGG BEATERS—See Beaters.

ELBOWS.

Adjustable Stove.
Inches..... 5 6 7
Smooth, per doz...$0.75 $0.85 $1.20
Plan'd, " 1.80 2.00 2.6[illegible]
Corrugated Conductor.
Discount.....75&10%
Corrugated Stove.
Inches..... 5 6 7
Smooth, per doz..$0.85 $1.00 $1.50
Pol'd, " .. 1.40 1.65 2.25
Plan'd, " .. 2.15 2.65 3.40
Four-Piece Stove.
Inches..... 5 6 7
Smooth, per doz..$0.60 $0.65 $0.95
Planished, " .. 1.40 1.70 2.30

EMERY CLOTH—See Cloth.

EMERY TURKISH.

Size .....5-lb. pkgs. ½ kegs, kegs.
No 60 to 150, per lb.. 6c 4c 4c
Flour..... " ... 5c 3c 3c

ENAMEL, IRON.

Nubian, ½-pt. cans.....per doz. 1 65
Peerless..... 1 25

EXTRACTORS, PIG.

See Forceps, Pig.

EYES.

Bright Wire Screw—See Goods, B. W.
Drifting Pick.....60, 10&5%
Hooks and—
Brass.....50&10%
Iron.....70%

FASTENERS, STORM SASH.

Schroeder's.....per doz. $0.85
Sensible..... " 1 15

FAUCETS—See Cocks.

FILES AND RASPS.

Delta.....70%
Kearney & Foot.....75&10%

FLUE STOPPERS—See Stoppers.

FORCEPS, PIG.

Superior.....per doz. $4 75
Whisson's Imp..... " 5 25

FORKS.

These goods are sold net this year.
Barley.
Steel New List.....65&10%
Wood, 4-tines, per doz.....$5 00
Coal, Coke, Cottonseed.....30%
Hay.
2-tine.....60%
3 " .....60&5%
4 " .....60&10%
Digging.....65&5%
Scoop.....30%
Header.
3-tine.....60&5%
4 " .....60&5%
Manure.
4-tine 60%
Ore.....40%
Spading.

FRAMES.

Hack Saw.
Union.....per doz. $5 75
Jenning's adj..... " 7 50
Cast..... " 2 50

FREEZERS, ICE CREAM.

Arctic.
Qts..... 1 2 3 4 6
Each...$1.10 1.30 1.50 1.80 2.30
Qts..... 8 10 12 15
Each.....$2.95 3.80 4.50 5.20
White Mountain.
20 qt., New Platform....each, $19 10
25 qt., " " " 22 60
25 qt., Sampson Power, " 43 50
40 qt., " " " 58 25
Ideal..... 3 25

GAUGES.

Butt and Rabbet.
Cream Pail.
Fairmont.....per doz. $3 75
Marking, Mortise, etc.....
.....50&10%
Saw.
Wire.
Disston's.....25%

GIMLETS.

Discount.....35@40%

GLASS, WINDOW.

Single.....90&20%
Double.....90&25%

GLASSES, LEVEL.

GLUE.

Bulk.
B Amber.....per lb. 12 c
A White..... " 15 c
H. S. Amber..... " 16½c
Liquid.
Army & Navy.....40%
Le Page's—
List "A".....37½%
List "B".....33⅓%
List "C".....25%

GOODS.

Bright Wire.....90%

GREASE, AXLE.

Wood Boxes.
Diamond.....per gro. $5 50
Frazer's..... 9 50
Hub Lightning..... 5 25
Paragon..... 6 75
Wood Pails.
Frazer's, 15 lb. 80c; 25 lb. $1.30 each.
Hub Lightning, 15 lb. 55c; 25 lb. 70c each.
Tin Cans.
Chamellene Graphite.
1 lb. per gross.....$9 50
3 lb. per gross.....25 00
5 lb. per gross.....37 00

GRIDDLES.

Soapstone.....33⅓%

GRINDSTONES.

Family.
Inches..... 7 8 9
Per doz.....$8.25 9.00 10.50
Loose.
Per ton.....$20 00@$21 00
Mounted.
Ball Bearing..... 1 2 3
Each.....$3.15 3.00 2.85
Common Bearing 1 2 3
Each.....$3.00 2.80 2.65

GUN WADS
(See Ammunition.)

HAFTS, AWL.

Brad.
Common.....per doz. $0 19
Peg.
Common..... " 22
Patent, plain top..... " 47
Patent, leather top... " 52
Sewing.
Common..... " 22
Patent..... " 52

HALTERS.

Jute Rope.....per doz. $1 10
Sisal Rope..... " 1 85
Web..... " 2 00
Leather, rope tie..... " 8 50
Leather, leather tie..... " 11 50

HAMMERS, HANDLED.

Blacksmiths' Hand.
Plumbs.....60&5%
Engineers'.
Plumbs.....60&5%
Farriers'.
Plumbs.....40&10%
Machinists'.
Plumbs.....60&5%
Nail.
Plumbs.....40&7½%
Quaker City.....per doz. $3 50
Cast..... " 1 15
Maydole's.....30&5%
Riveting.
Plumbs.....40&12½%
Shoe.
Cast.....per doz. $0 75
Tack.
All Iron.....per doz. $0 35
Pol'd Iron, Hickory hdl. " 50
Mall. Iron, Inlaid..... " 1 55
Magnetic..... 1 2 3
Per doz.....$0.70 .80 1.00
Magazine.. .....per doz. 4 75

HAMMERS, HEAVY.

Heavy Hammers and Sledges.
Under 5 lbs .....80&5%
5 lbs. and over.....80&10%
Masons'.
Single and Double Face.....80&5%

HANDLES.

Auger.
Common Assorted....per doz. $0 38
Peck's Adjustable.... " 2 10
Ives' Adjustable.....per set, 1 35
Axe.....60%
Chisel.
Hickory, Tanged Firmer, Assorted, 33c; Large, 38c per doz.
Hickory, Socket Firmer, Assorted, 27c; Large, 30c per doz.
Applewood, Tanged, Firmer, Assorted, 29c; Large, 38c per doz.
Applewood, Socket, Firmer, Assorted .....per doz $0 24
Coal Pick.....50&10%
Drift ng Pick.....50&10%
File, assorted, 13c; Large, 16c per doz.
Hammer.
Adze Eye.....per doz. $0 40
Blacksmiths'..... " 40c@70c
Machinists'..... " 45c@70c
Hatchet..... " 40
Hay and Manure Fork.....30%
Hoe and Rake.....30%
Plain.....per doz. $0 75
Varnished..... " 80
Screw Driver.
Assorted..... " 37
Large..... " 48
Shovel and Spade.....33⅓%

HANGERS.

Barn Door.
Nansen.....60&10%
Matchless.....70&10%
Storm King.....60%
World's Best.....50%
Wagner's Adjustable.....70&10%
Warehouse.....60%
Conductor P.
Griffin.....70&10%
Iwan's Perfection.....50%
Eave Trough.
Baker's.....per gro. $2 35
Imperial.....20%
Wire.....33⅓%
Parlor Door.
Acme.....per set, $3 75
Ives' Improved..... " 2 50
Lane's Standard..... " 3 50
Lane's New Model.... " 3 10
Le Roy Noiseless..... " 4 00
Richards'.....40-10&5%

HASPS.

Hinge, Wrought.....40%
With Staples—See Staples.

HATCHETS.

Crown.....50-10&5%
Cast Claw.....per doz. $1 20@1 45
Cast Shingling.... " $0 95@1 20
Germantown.....40%
Plumbs.....33⅓&5%

HAY KNIVES.

See Knives.

HAY RACK BRACKETS.

Wenzleman's No. 1.....per doz. $9 00
Wenzleman's No. 2..... " 9 00

HINGES.

Blind.
Clark's Gravity ... per doz. sets, 95c
Parker's.....65%
Shepherd's Noiseless, for Wood Casing.....per doz $1 05
Gate.
Clark's..... 1 2 3
Hgs & Ltch. . doz. $2.50 2.90 4.00
Hinges only... " 1.90 2.20
Latches only . " .70 .75
Knuckle.....per doz prs. $6 00
Leed's..... " sets 6 75
Superior..... " prs. 9 50
Spring.
American.....20%
Chicago.....25&5%
Columbia Dbl. Acting....40&10&5%
Gem.....25%
Ideal Detachable.....per gro. $11
Matchless.....30%
New Idea.....per gro. $8 00
Oxford.....20%
Wrought Iron
New Lists .....
McKinney
Light Strap Hinges.....60%
Heavy Strap Hinges.....65%
Light T Hinges.....55%
Heavy T Hinges.....45%
Extra Heavy T Hinges.....60%
Screw Hook and Strap.
6 to 12 in.....per 100 lbs. $3 75
14 to 20 in..... " " 3 65
22 to 36 in..... " " 3 40
Screw Hook and Eye.
½ in.....per 100 lbs. $6 75
⅝ in..... " " 7 75
¾ in..... " " 9 75

HOES

Garden .....70&10%
Grub.
Extra.....70%
Hazel.....per doz. $5 00
Ladies' and Boys'.....75%
Mortar.....75&10%
Planter's Eye.....62½%
Weed.....75&15%

HOLLOW WARE—See Ware.

HOOKS.

And Eyes.
Brass.....50&10%
Iron.....65&10%
Awning.....per gro. $1 00
Belt.
Brown's.....70&5%
Jones'.....65&5%
Bench.
See Stops, Bench.

Box.
Inch..... 6 8 10 12
Per doz.....$1.35 1.65 1.75 2.30
Humason & Beckley's..per doz. $2 50
(See Goods, Bright Wire.)
Bush.
Common Axe Handle. per doz. $7 00
Chain.
Inch..... ¼&5/16 ⅜ 7/16 ½
Per 100...$7.60-8.10 9.75 11.50 12.60
Clothes Lines.
Japanned .....per doz 22c@24c
Galvanized..... " 40c
Coat and Hat
Cast Iron .... per gro. 72c@$1 50
Gem Wire.....70%
Conductor.
Malleable.....25%
Wrought.....20%
Corn.
Common, unpolished, per doz. $1 50
Little Giant..... " 3 25
Gate.
See Goods, Bright Wire.
Grass.
Common. Nos..... 2 3 1
Per doz.....$1.50 1.60 1.70
German.....per doz. 1 75
Little Giant..... " 2 75
Hammock.
With plate.....per doz. 50
With screw..... " 45
Lambrequin, or Drapery, per gro. .21c
Picture.....50%@50&10%
Potato and Manure.....70&12½%
Screw.
Brass.....80&5%
(See Goods, Bright Wire.)
Seat Spring .....per lb. 5½c

HOOPS, TUB.

Elastic ... per case of 2 doz.... $1 50

HOSE, GARDEN.

				Coupled, per ft.
Heron, 3 ply-¾" guar. press				55 lbs. 7½c
Crane..	"	"	"	75 " 8½c
Falcon	"	"	"	95 " 9½c
Eagle	"	"	"	120 " 10½c
Condor	"	"	"	150 " 11½c
High Test	"	"	"	200 " 12½c

COTTON COV. RUBBER HOSE.

High Grade-¾"-guar. press. 400 lbs. 11½
Special " " " 300 " 9½c
Leader " " " 100 " 7½c

HUSKERS.

Boss.
Nos..... B BB E 200
Per doz.....$2.00 2.00 1.75 .80
Nos..... L PP P K
Per gro.....$5.40 6.00 6.00 10.50
Nos..... 2000 3000 O
Per gro.....$3.50 9.00 24.50
Nos..... 60 59 64 68
Per doz.....$2.15 2.15 .85 1.45
Brinkerhoff's.
Per gro.....$14 40
Clark's.
No..... 1 63 200 400
Per doz.....$0.40 .75 .75 1.75
Nos..... 200s 40s 3s 4s
Per doz..... $0.85 .50 1.25 1.25
Nos..... A AB F
Per doz.....$3.00 $4.25 $2.50

IRON.

See Metals.—First column.

IRONS.

Curling.
X.....per doz. $0 40
Y..... " 50
Z..... " 58
Jewel..... " 85
Imperial..... " 1 00
Pinking..... " 70
Plane.
Wood Bench.....20&5%
Sad.
Charcoal.....per doz.$11 00
Common, polished, per 100 lb. 4 50
Common, nickel plated, 5 25
Chinese Polishing.....per doz. 7 40
Laundry, No. 1..... " 5 75
Laundry, No. 2..... " 6 25
Mrs. Pott's,
No. 50 J, Enterprise, per set 93
No. 55 J, " " 90
No. 50 T, " " 1 00
No. 55 T, " " 96
No. 50, Bless & Drake " 93
No. 55, " " 99
Tailors' Sad.....per lb. 5½
Tailors' Geese..... " 5½
Tuyere.
Single Duck Nest.....per doz $5 25
Double Duck Nest .. " 6 25
Sutton.....each.... 2 60

JACKS.

Locomotive.....70%
Wagon.
Oliver,
Nos..... 0 00
Each.....$0.60 $0.80
Standard.
Nos..... 1 2
Each.....$0.60 1.00
Wilcox.
Nos..... 1 2 3
Each..... $0.85 1.20 2.90

KETTLES.

Brass.....15%
Cauldron.....40&5%
Copper..... per lb., 27c
Maslin.....65%
Sugar.....50%

KNIVES.

Beet Topping.
Clyde, 9-in. Scimiter Blade, doz.$3 85
California..... 3 40
Cooper's Hoop.....15%
Corn.
Clipper.....per doz. $1 75
Disston's..... " 2 75
Earle's..... " 3 00
Woodford..... " 2 25
Drawing.
Standard.....70%
Adjustable.....15%
Barton's Carpenters' 10%
Folding Handle.....25&5%
Hay.
American, Sickle Edge...doz. $10 50
Canton, Sickle Edge..... " 8 25
Heath's..... " 8 00
Iwan's, Sickle Edge..... " 9 50
Iwan's, Impv'd Serrated . " 10 00
Lightn'g, Holt's Genuine. " 6 50
Lightning Pattern..... " 6 00
Wadsworth's Sp'r Point.. " 8 50
Hedge.
Challenge.....per doz. $6 00
Disston's..... " 3 75
Mincing.
Common, Single..... " 40
Common, Double .... " 56
Streeter, 4-Blade..... " 1 30
Streeter, 6-Blade..... " 2 00
Putty.
Common.....per doz. $0 60@1 00
Lander'r..... " 1 40@1 75
Scraping.
Beech Handle..... 75@1 00
Lander's..... 5 25@6 00

KNOBS.

Door.
Mineral.....per doz. $0 80
Porcelain..... " 90
Jet..... " 90

LADDERS.

Common Long.
Per ft.....9c@14c
Extension.
Per ft.....14c
Step.
Common, per ft.....7½c
Common, with Shelf, add 10c.
Keystone.....15c
Triumph, per ft.....20c

LANTERNS.

Bull's Eye Police.
3 -in. Flash Light....per doz. $6 00
2¾-in. Regular..... " 4 90
3 -in. Regular..... " 5 50
Tubular.
Buhl . . . . . .net prices.

LEADERS, CATTLE.

Nos..... 1 2 3
Per doz..... $0 55 .70 2.75

LEATHER, LACE.

Cut.....33⅓%
Sides.
Ex. Quality ..... per sq. ft., 27

LEATHERS, PUMP.

Valve and Plunger.....10%

LIFTERS.

Stove Cover.
Coppered.....per gro. 1 75@3 65
Ideal..... " 5 50
Alaska, Coppered " 4 00
Alaska, Nickeled. " 5 00
Transom.
Payson's.....80%

LINES.

Chalk.
Twisted in 20-ft. hanks.
Nos.... 4 6 7 8 9
Gross...$1.50 2 00 2 25 2 50 3 00
Twisted in 50-ft. balls.
Nos..... 1 2 3 4
Per doz.....25c 30c 35c 41c
Braided in 20-ft. hanks.
Nos..... 0 1 2 3
Per doz.....22c 25c 31c 35c
Mansons', in 100-ft. hanks...doz. 80c
Clothes.
60-ft. Jute.....per doz. $0 95
72-ft. Jute..... " 1 15
60-ft. Sisal..... " 1 40
72-ft. Sisal..... " 2 15
50-ft. Cotton..... " 1 15
50-ft. Braided Cotton. " 25

LINING, STOVE.

In Bricks .....per crate. 42c

MACHINES.

		Without Augers	With Augers
Boring.			
Angular.....	per doz.	3 00	4 40
Upright.....	"	2 60	4 00
Leather Riveting.			
Chicago, Pomeroy....	per doz.	$9 00	
Excelsior.....	"	2 00	
Handy.....	"	2 00	
Little Giant.....	"	3 00	
Pony, Pomeroy.....	"	7 20	
Washing.			
Winner.....	per doz.	54 00	
Keystone.....	"	54 00	
U. S. Steel.....	"	60 00	
Advance, f.o.b.Chicago	"	24 50	

MAIL BOXES.

See Boxes.

MALLETS.

Carpenters'.
Fibre Head, Small....per doz. $5 00
" " Medium. " 5 75
" " Large.. " 7 00
Round Hickory..... " 2 25
" Lignumvitæ... " 4 00
Square Hickory..... " 2 25
" Lignumvitæ... " 4 50
Tinners'.
Applewood..... " 1 70
Hickory..... " 1.00@1 50
Hickory Sheet Iron... " 1 50

MATS

Door
National Rigid.....50, 10&5%
Acme Steel Flexible.....33⅓%
Stove.
No. 2.....per gro. $3 25
No. 1..... " 3 50
No. 1 Asbestos Toasters, or wire-covered Stove Mats, with handle.....per doz. 1 10
No. 2 Asbestos Toasters, with ring.....per doz. 60

MATTOCKS.

Plumbs.....65&10%
Extra.....60%

MAULS.

Iron, lbs..... 10 13 16 18
Per doz.... $4.00 4.50 5.25 5.60
Wood face, lbs..... 10 12 14
Per doz..... $5.00 5.50 6.00
Wood Choppers'.
Lake Super'r & Oregon Pat. 75&10%

MEASURES.

	½ pk.	1 pk.	bu.
Galvanized, per doz.	$2.25	3.00	3.85
Japanned.. "	1.75	2.45	3.15

MICA.

First Quality.....20%
Second Quality.....25%

MILLS, COFFEE.

Enterprise.....25%
Parker.....40-12½&2½%
Arcade.....40-12½&2½%

MITRE BOXES.

See Boxes.

MOPS.

Erie.....per doz. $3 15
Handled Cotton.
Pounds..... ¾ 1 1½ 2
Per dozen....$2.00 2.35 2.65 3.25

MOWERS, LAWN.

Gladiator—B. B.
Inches..... 16 18 20
Each..... 6.50 7.25 8.00
King Universal—B. B.
Each..... 5.25 5.75 6.00
Inches..... 14 16 18
Big Giant..... 3.50 3.90 4.25
Little Giant..... 2.50 2.65 2.75
Philadelphia.
All Styles, except A & E, 60, 10&10%
Style A.....50&10%
Style E, High Wheel....60, 10&10%
Drexels.....40%
All Day .....Net Price

NAILS.

Cut Steel .....rates, $2 50
Cut Iron..... 2 60
Wire.
Small Lots..... $2 40
Carload Lots..... 2 35
Cement Coated..... 2 30
Horse Shoe.
Ausable.....55&5%
Capewell.....15%
Perfect.....55&5%
Putnam.....20&5%
Star.....35&5%
Clover Leaf .....per lb., net, 10½c
Picture.
Brass Heads.....25%
Brads.....85%
Furniture.....15%

NAIL PULLERS.

See Pullers.

NAIL SETS.

See Sets.

NETTING, POULTRY.

Galvanized beforeweaving .80,10&2½%
Galvanized after weaving.....80&7½%
Cut Pieces.....65&5%

NIPPERS.

End Cutting.
Stubb's Pattern. Inches 5½ 6
Per dozen..... $4.00 4.25
End and Diagonal Cutting.
Swedish Side.....75%
Utica Drop Forge & Tool Co....60%
Hoof.
Heller's.....40&10%
V. & B.....55&5%

NOZZLES.

Hose.
Genuine Gem.....per doz. $3 00
Magic..... " 3 60
Mystic..... " 3 00

NUTS, HOT PRESSED.

Square Blank.
In ½ 9/16 ⅝ 11/16 ¾ ⅞ 1
lb 9½c 8c 6½c 5½c 5½c 5c 4½c
Square Tapped.
In. ½ 9/16 ⅝ 11/16 ¾ ⅞ 1
lb. 12½c 10½c 8c 7½c 6½c 6½c 6c
For 5-lb. boxes add ½c per lb. to above prices.

OILERS.

Chase Pattern.
Brass and Copper.....60%
Zinc.....60%
Engineers'.
Cannon.....55%
Tin .....per doz. $2 00@$2 25
Machine.
Common.....per doz. $0 58
Copper Plated Steel... " 1 00
Malleable Iron.....60, 10&5%
Japanned.....65@75c

OPENERS.

Box.
Inches..... 10 12 14
Flat.....per doz. $2.85 3.60 4.15
Round.... " 2.10 2.25 2.75
Can.
Delmonico .....per doz $1 30
Never Slip..... " 65
Crate.
V. & B..... " 5 75

OUTFITS, COBBLING.

Combination.....per doz. 11 00
Economy..... " 4 65
Family..... " 9 75

PADLOCKS.

Standard Wrought.....75&5%
Champion.....50%
Eureka.....40, 10&5%
Yale.....60&5%

PAILS.

Cream.
14-qt , without gauge, per doz. $2 50
20-qt., " " " 3 00
20-qt., with gauge.... " 3 50
Sap.
10-qt., Galvanized, per 100....$13 00
12-qt., " " 14 50
14-qt., " " 16 25
16-qt., " " 17 75
10-qt.,IC Tin..... " 10 25
12-qt., " .... " 11 75
14-qt., " .... " 13 00
10-qt.,IX Tin.... " 12 75
12-qt., " .... " 16 00
14-qt., " .... " 17 00
Stock.
Galv'd, qts. 14 16 18 20
Per doz..... $3.75 4.00 4.75 5.25
Water.
Galvanized... qts. 10 12 14
Per doz..... $1.95 2.20 2.45
Wood.
Cable, 2-Hoop.....per doz. $1 70
Cable, 3-Hoop..... " 1 90
Cedar, 3-Hoop..... " 2 85
Standard, 2-Hoop.... " 1 00
Standard, 3-Hoop.... " 1 80

PANS

Dripping.....60&5%
Fry
Common .....75&10%
Acme 70%
Roasting.
Paxton,
Nos..... 1 2 3 4
Per doz.... $4.75 5.75 6.50 7.50
Neverburn .. 4.00 4.50 5.50 6.00
Savory, No. 200.....per doz. $8.00

PAPER.

Building.
Plain.....per 100 lbs. $1 25
Tarred..... " 1 35
Tarred Felt..... " 1 65
No. 20, Red Rosin....per roll, 40
No. 30, Red Rosin.... " 55
Sand and Emery.
Star ..... low list, 50%
B. & A..... 50%
Wrapping.
Drab Fiber.....per lb $0 00
Rag..... " 0 00

PARERS.

Apple.
Bay State.....per doz. $13 00
Turntable..... " 0 00
White Mountain..... " 5 00
Reading..... " 7 00
Potato.
Goodsell's Saratoga, 10½ in., doz. 6 50
Goodsell's Saratoga, 5 in., doz. 5 50

PICKS.

Adze Eye Ore.....70%
Drifting and Poll Picks.....70%
Plumbs, Railroad.....70%
Surface.....70%

PINCERS.

Carpenters', cast steel.

Inches.....	6	8	10	12
Per doz.....	$2.00	2.60	2.95	3.75

Blacksmiths'.....45%
Heller's.....40%

PINS.

Clothes.
Common.....per box of 5½gro $0 52
Hoyt's..... " " 31
U. S..... " " 70
Picket.
Fluted, 15-in.....per doz. $0 70
Fluted, 21-in..... " 1 60
Spiral..... " 1 00

PIPE.

Conductor.

	Gal. Steel	Charcoal
L. C. L. to Dealers:—		
Eastern	70&10%	50&10&2½%
Pittsburgh	75&10&5%	60%
Central	75&10%	60%
Northwestern	75&7½%	60%
Western	70&12½%	50&12½%
Tennessee	70&10%	50&12½%
Southern	70%	50&12½%
Southwestern	70%	50&5%

Terms 60 days; 2% Cash 10 days.
Factory shipments generally delivered.

Lead.
Full coils.....per lb. 7¼c
Cut coils..... " 7¾c
Stove

Acme—Inches....	5	6	7
Smooth, per jt...	8¼c	9¼c	10¾c
Planished, "	32 c	33 c	43 c
Peerless—Smooth,	7¾c	8 c	9¾c
Polished.....	14¾c	15¾c	18 c
Planished.....	28 c	31 c	35¾c
Made-up—Inches..	5	6	7
Smooth.....	7¾c	8 c	9¾c

7 to 6 in. Smooth Tapers, pr jt...13c
6 in. Smooth T's..... " 27c
7 to 6 in. Planished Tapers.....45c

Yale Patent Lock Pipe—Stove.

	5"	6"	7"	7"to8"
Blue Steel:	Cents			
Battle Axe Blue...	7	7¾	9½	10½
Can't Slip " ..	7½	8½	10	11
Peerless " ..	7½	8½	10	11
Duplex " ..	10	11	13	14
Yale, Rus. Fin....	15	16	17	18
Duplex Planished.	29	31	37	38
Galvano, Gal.....	15	16	17	18

If wanted made up, add per joint or grooved, 1c; riveted, 1½c. Grating made-up pipe extra.

Wrought Iron Gas Pipe.
⅛@½-in., black.....discount, 60%
⅝@¾-in., black..... " 60,10&5%
⅞-in. to 6-in, black... " 70%
7-in. to 12-in., black... " 62½%
⅛@½-in., galvanized.... " 42%
⅝@¾-in., galvanized.... " 50%
⅞-in. to 6-in., galvan'd " 57½%
7-in. to 12-in., galvan'd " 45%

PLANES.

Sargent Iron Bench.....60%
Stanley Iron Bench.....25&5%

PLATES, TIN.

See Metals in Column 1.

PLIERS.

Button's—Ins..	4½	6	8	10
Per doz.....	$2.75	3.35	4.15	5.15

Button's Pattern.

Inches.....	4½	6	8	10
Per doz.....	$2.25	2.75	3.25	4.25

Cutting.
Bernard's.....30%
Lodi.....50%
End and Diagonal Cutting
Swedish Side.....70%
Utica Drop Forge & Tool Co....50%
Fencing.
Farmers' Choice.....per doz. $8 00
Russell's..... 8 25
Flat and Round Nose.
Bernard's.....30%
German.....65%
Lodi.....50%
Paragon.....50%

Gas.—Inches..	7	8	10	12
Per doz.....	$3.00	3.50	4.50	5.50

Tinners'.
Hollow.....40%
Solid.....each, 5½c

PLUMBS AND LEVELS

Common.....60&10&10%
Cook's.....40%
Davis' Iron.....25%
Davis' Inclinometer.....15%

POINTS

Drive Well Points.....75&5%

POKERS, STOVE.

Wr't Steel, str't or bent, per doz. $0 55
Wr't Steel, wood hand'ls " 80
Nickel Plated, coil hand'ls " 65

POKES, ANIMAL.

Cracker Jack, wr't steel, per doz. $4 50

POLISH.

Metal.
Pride of the Bar..... $1 60
Putz Cream,

Pts.....	1-6	½	¾
Per doz.....	$0.80	1.10	1.65

Pts.....	1	2	3	8
Per doz..	$2.75	4.50	7.50	12.50

White Silk, half pints, per doz, $2 00
White Silk, 6-oz. cans, per doz. 1 00
Wondershine,

Pts.....	1-6	½	1	2
Per doz.	$0.70	1.35	2.25	3.00

George William Hoffman.
U. S. Metal Polish Paste, 3-oz boxes, per doz, 50c: per gro 4 55
½-lb. boxes.....per doz 1 20
1-lb. boxes..... " 2 25
U. S. Liquid, 8-oz cans, per doz, $1.25.....per gro 12 00
Barkeepers' Friend Metal Polish.....per doz 1 75
.....per gro 18 00
Shoe.
M. C. D.....per doz.....36c@50c
F. C. O..... " 40c
T M..... " .35c@$1 75
Imperial.....per gro..... 5 00
Stove.
Black Eagle, 1-lb. cans, pr gr, $15 00
Black Silk—
5-lb. pail..... $0 70
Paste, 5-oz. cans....per doz. 75
Paste, ½-lb. cans.... " 1 05
Liquid, ½-pt. cans... " 1 05
Liquid, 6-oz. cans... " 75
Steel Range Gloss.... " 1 25
Blackene, 1-lb. cans...per gro. 13 00
Blackene, 1-lb. cans...per gro. 13 00
Black Jack, ½-lb. cans. " 9 25
Dixon's Card. of Iron. " 5 75
Nickel Plate..... " 4 50

POPPERS, CORN.

Round or Square, 1-qt. per doz. $1 05
Square, 1½-qt..... " 1 15
Square, 2-qt..... " 1 35
4-qt..... " 3 75

POTS, FIRE.

Berns.....each, $3 85
Clayton & Lambert's,each,$4 75@6 25
Gate City.....each, 6 25
Gem.....each,$6 75@8 50

POWDER.

See Ammunition.

PRESSES, FRUIT AND JELLY.

Enterprise Manufacturing Co.....25%
Henis.....per doz. $1 85

PRIMERS

See Ammunition.

PRUNERS.

Disston's Pole.....per doz. $6 50
Henry's Improved..... " 75&10%
Water's Improved..... " 60%

PULLERS.

Cork.
Daisy..... each, $3 10
Phœnix..... " 1 40
Quick and Easy..... " 2 70
Nail.
Giant.....per doz. 10 50
Giant Pattern..... " 6 00
Jumbo..... " 9 00
Tack—Giant..... " 40

PULLEYS.

Awning—Jap'd.....60%
Clothes Line.....50&10%
Hay Fork.
Iron Wheel, 5-in.....per doz. $1 75
Wood Wheel, 6-in.... " 1 75
Wood Wheel, 6-in., pass knot, ...per doz. 2 15
Hot House—Jap'd.....50&10%
Screw—Jap'd.....60%
Side—Jap'd.....50&10%
Sash.
Common.....per doz. $0 20
Common-Sense, 2-in.. " 20
Empire Pattern, 2-in.. " 20
Ideal..... " 20
Steel..... " 25

PUMPS.

Pitcher Spout.

Nos.....	1	2	3	4
Each.....	$1.00	1.15	1.30	1.70

Spray.
Blizzard.....per doz.$14 50
Cyclone, tin..... " 3 40
Cyclone, copper..... " 6 75
Daisy..... " 9 00
Little Giant.....each,... 2 25

PUNCHES.

Conductors'.
No 22.....per doz $2 25
Machine.....per lb 19
Saddlers'.
Common.....per doz 60c@70c
Good..... " 72c@84c

PUTTY.

In Bladders.
Strictly pure.....per 100 lbs. 2 35

RAIL.

Barn Door.
Matchless, 1-in..... 3 c
Matchless, 1½-in..... 3½c
Storm King..... 4 c
Sliding Door.
Painted steel.....per ft. 4½c
Bronzed wrought iron...per ft. 8½c

RAKES.

Coal or Wood.....per doz. $5 20
Garden.
Steel.....70%
Steel, bow.....70%
Malleable iron, heavy.....60&10%
Hay.
Wood.....$1 50@$2 00
Lawn—Wood.
XXX.....per doz. $3 00
Automatic..... " 5 25
Lawn Queen..... " 2 75
Jumbo, 36 teeth..... " 5 25

RASPS—See Files.

RAZORS.

Bo-ras-ic.....50%
Red Devil.....50%
Tree Brand.....50%

REGISTERS.

List December 5, 1904.
Black and White Japanned, Reg. and Border.....70&10%
On Face.....75&10%

RINGS.

Bull.

Copper.....	2½ in.	3in.
Per doz.....	$1 10	$1 40
Rea's Improved Self-Piercing copper, pr doz	2 00	....
Steel, per doz.....	85	95
Nickel plated.....	1 35	....

and Ringers—Hog.
Blair's Rings.....per doz. $0 58
Blair's Ringers..... " 75
Brown's Rings..... " 50
Brown's Ringers..... " 80
Champion Ringers.... " 1 60
Hill's Ringers..... " 70
Hill's Ring, boxes.... " 47
Major Rings..... " 60
Perfect Ringers..... " 95
Wolverine Rings..... " 1 40
Wolverine Ringers.... " 80
Fruit Jar.
White.....per lb.....30c
Key.
Split, round.....per doz. $0 17
Split, square..... " 32
Ball, round..... " 32

RIVETS.

and Burrs.
Copper Belt.....40%
Coppered Iron.....60&10&5%
Tinners'.....60&10%
Hame.....per lb. $0 10
Slotted Clinch per doz 40c@45c
Tubular
Nos 1 and 2 assorted sizes, doz. 45c

RIVET SETS

See Sets.

ROPE.

Cotton.
¼, 5-16 in. Com on reels. .per lb. 11½c
¼, 5-16 in Com. in coils. . " 12 c
¼, 5-16 Imperial in coils.. " 21 c
Sisal.
1st Quality.....12 c
Hardware Grade, rates, per lb...10 c
Pure Manila.
1st quality.....per lb.15½c
Hardware Grade, rates... " 14½c

RULES.

Boxwood.....50&10%
Ivory.....

SASH WEIGHTS.

See Weights.

SAWS.

Back.
Disston's.....25%
Jackson's.....25%
Butchers'.
Disston's.....30%
Circular.
Disston's.....50%
Hiles'.....50&10%
Compass.
Common.....per doz $1 35@1 60
Disston's.....%25
Cross-Cut
Disston's.....45%
Dehorning.
Disston's.....per doz. $5 75
Hack.
Disston's.....25%
Keystone.....30%
Hand and Rip.
Brown's.....30%
Disston's No. 7.....30%
Disston's Nos. 8, D8, 12, 76, 112, D100, and 120 (new list).....25%
Keystone.....30%
Enterprise, hand.....per doz. $5 00
Our Saw, hand..... " 4 00
Our Saw, rip..... " 4 50
Keyhole—Disston's.....25%
Kitchen.
Sterling.....25%
One Man.....50%
Panel
Brown's.....30%
Disston's No. 7.....30%
Disston's No. D100.....25%
Pruning.
Brown's.....25%
Disston's.....25%
Wood
Common.....per doz. $4 50
Clover Leaf..... " 6 00

SAW BUCKS—See Bucks.

SAW SETS—See Sets.

SAW TOOLS—See Tools.

AW FRAMES.

Common, plain.....per doz. $1 25
Common, painted..... " 1 70

SCALES.

Counter.
Pelouze.....40&10%
Platform.
Osgood.....50%

SCOOPS.

Grain.
½-bu. "Hercules".....per doz. 13 70
1-bu. "Hercules"..... " 15 00

SCRAPERS.

Box.
Triangular.....per doz. $4 00
Cabinet.
Cast Steel.....per doz, 60c@75c
Road.

Cubic ft.	7	5	3
Without run's, ea.	$4.00	3.75	3.50
With runners, ea..	4.25	4.00	3.75

SCREWS.

Bench.

Iron, in.....	1	1½	1¾
	$3.50	4.00	4.75

Wood, white maple...per doz. $3 50
Hand—Wood.....10%
Hand Rail.....50&10%
Jack.....70&10&5%
Lag or Coach—all sizes, gimlet pointed.....75&5%
Saw—Centennial

Nos ..	1	2	3	4	5	6
Per doz.	18c	20c	26c	30c	23c	25c

Wood.
F. H. Bright.....87½&5%
R H Blued.....85%
F. H. Jap'd.....82½%
F. H. Brass.....85%
R. H. Brass.....80%
R. H. Nickel Plated.....75-10%

SCYTHES.

Be Ve Be, grass.....per doz. $8 50
Clipper, grass..... " 8 00
Clover Leaf Dutchman. " 8 00
Honest Dutchman..... " 8 00
Be Ve Be..... " 8 00

SHAVING SETS.

Smith & Hemenway.....60%

SETS.

Nail.
Round, common.....per doz. $0 33
Square, common..... " 42
Octagon, common.... " 33
No. 5, square..... " 75
Cup point, knurled... " 75
Rivet.
Farmers'.....per doz. $1 20
Tinners'.....50&10%
Saw.
Aiken's Pattern.....per doz $3 50
Common Lever..... " 1 20
Disston's Monarch.... " 6 50
Disston's X Cut ..... " 12 00
German..... " 1 05
Morrill's Old Style.... " 5 00
Morrill's Pattern..... " 3 25
Leach's..... " 80
Nash's Hand..... " 3 15
Nash's X Cut..... " 4 20
Stillman's Lever..... " 1 30
Stillman's X Cut..... " 2 50

SHARPENERS, SKATE.

Diamond.....per doz $1 60
Smith & Hemenway 20%

SHAVES, SPOKE

Iron.....per doz $1 10@1 85
Wood ..... " 2 75@4 75
Bailey's .....50&5%
Goodell's 15%

SHEARS

Pruning
Buckeye, No. 1.....per doz $5 75
Buckeye, No. 2..... " 7 40
California Pat., 9-in.. " 3 20
Cailfornia Pat., 10-in.. " 4 00
Draw Cut, No. 3..... " 13 75
Draw Cut, No. 4..... " 16 50
Henry's Pat. 0 01 14 012
Per doz.....$1.40 2.10 2.90 2.80
Star.....per doz $4 00
Sheep—No BBA.
Inches..... 6 6½ 7
Reg. Grip.....$11.25 11.50 12.00
Nar. Grip.,doz.... 11.00 11.25 12.25
Tinners'—See Snips.

SHEAVES, SLIDING DOOR.

Common.
Inches..... 3 4 5
Per set..... $0.34 .42 .70
Hatfield's.
Per set..... $0.75 1.00 1.60

SHELLS—See Ammunition.

SHELLERS, CORN.

Union.....per doz. $6 75

SHIELDS.

Expansion Bolt Shields.....50&10%

SHOES.

Conductor.....60&10%

SHOE POLISH—See Polish.

SHOT—See Ammunition.

SHOVELS AND SPADES.

Coal.
No 2 Woodford.....per doz. $5 50
No. 182..... " 6 00
Ames' new list .....Discount, 12½%
Per doz.
Neverbreak, hollow bck, blk. $15 75
National.... " " " 14 75
Buckeye.... " " " 10 00
Mohawk.... " " " 9 00
Drain.
Iwan's Perfection.....50%
Railroad, etc.
Black Diamond.....per doz. $1 50
Crescent..... " 5 75
Keystone..... " 8 75
Star..... " 4 75
Vaterland..... " 9 50
Hollow Back..... " 4 75
Ames, new list .....Discount, 12½%
Snow.
Per doz.....$1.65@$9.00
Alaska Steel.
D Handle.....per doz. $3 50
Long Handle..... " 3 00

SINKS.

Cast Iron.
Painted.....50&10%
Enameled, White.....50&10%
Wrought Steel.
Painted, new list.....40-10&5%

SLEDGES—See Hammers.

SNAPS, HARNESS.

Champion.....33⅓%
German Pattern.....30&5%
Judd's Pattern.....50%

SNATHS.

Double Ring, Bush.....per doz. $6 00
Patent Loop, Bush..... " 5 75
Patent Loop, Grass..... " 5 50

SNIPS, TINNERS'.

Clover Leaf.....40&10%
National.....40&10%

SOLDER—See Metals.

SPRINGS, DOOR.

Perfect.
Nos..... 1 2 3 4
Per doz.....30c 35c 40c 54c

Reliance.
Per doz ... light, $1.25; heavy, $2 50
Star.
Per doz . . . light, 90c; heavy, $1 35
Torrey's.....per doz. $1 35
Warner's No..... 11 13
Per doz..... 75c $1 35

SQUARES.

Steel and Iron.....70&10%
(Add for bluing, $2.50 per doz., net.)
Mitre.
Try.
Try and Bevel.
Try and Miter.
Fox's.....per doz. $5 75
Winterbottom's.....70%

SQUEEZERS, LEMON.

Common Wood.....per doz. $0 70
Porcelain Lined, Wood.. " 1 25
Boss, malleable iron.... " 1 20
Iron Frame, porc'n bowl " 1 90
Iron Frame, glass bowl . " 2 35
Little Giant, tin'd iron . " 4 00
Drum, japanned..... " 3 60
Drum, nickel plated ... " 4 50

STAPLES

Blind.
Barbed.....per lb . . .9¼@9½c
Butter Tub..... " .....8 @8½c
Fence—less than carload.
Polished.....per 100 lbs. $2 30
Galvanized..... " 2 00
Netting.
Galvanized.....per 100 lbs. 4 00
Wrought.
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples.....80-10&10%
Extra heavy.....75&10%

STEELYARD.
Discount 25%.

STONES.

Axe.
Hindostan.....per lb 5½@7 c
More Grit..... " 9½c
Washita ..... " 17 c
Emery.....60%@60&5%
Oil—Mounted.
Arkansas Hard.....per doz.$23 00
Arkansas Soft..... " 15 50
Hindostan .....per lb 6½@6½
Oil—Unmounted.
Arkansas Hard.....per lb $2 05
Arkansas Soft ..... " 1 10
Lily White..... " 45
Queer Creek..... " 15
Ouachita..... " 38
Washita..... " 26
Sythe.
Black Diamond.....per gro. $8 00
Crescent..... " 4 25
Gem Corundum..... " 7 50
Green Mountain..... " 4 50
La Moille ..... " 7 00
Quinnebog..... " 5 00
Red End ..... " 3 75

STOPS, BENCH.

Hotchkiss'.....per doz. $3 50
Stearns'..... " 4 75

STOPPERS, FLUE.

Common.....per doz. $0 40
Crown..... " 45
Gem, flat, painted..... " 85
Gem, cor'd, decorated... " 70
Kirch's..... " 90
Perfect..... " 70@85
Skinner's Common Sense " 80

STOVE PIPE—See Pipe.

STOVE BOARDS—See Boards

STOVE POLISH—See Polish.

STRAPS.

Scoop.....per doz prs., $1 85
Skate..... " " 00@70c

STRETCHERS.

Carpet.
Bullard's.....per doz. $3 90
Excelsior..... " 5 25
Malleable Iron..... " 70
Perfection..... " 6 30
King..... " 4 50
Wire.
N. S. Elwood's.....per doz. $6 00
O. S. Elwood's..... " 6 00
Little Giant..... " 5 75
Safety..... " 10 00
Star Lever..... " 6 25
Canton Tackle Block. " 9 50
Warner's ..... " 6 25

SWIVELS.

Malleable Iron.....per lb. $0 70
Wrought Steel.....per gro. 4 50

TACKS.

American Cut.....90&15%
American Wire.....85&20%
Bill Posters Cut.....90&20%
Blued Carpet.....90&10%
Tinned Carpet.....90&10%
Gimp.....90&10%
Upholsters' Cut.....90&20%
Upholsters' Wire.....90&10%
Double Pointed.....90%
Copper.....per lb. 32c
Canvas Nails.....75&5%
Clout Nails.....75&10%
Hungarian Nails.....80%

TAPES, MEASURING.

Asses' Skin.....40&10%
Bend Leather.....20%
Patent Leather.....20%
Lufkin's Steel.....25%
Lufkin's Metallic.....30%

TEE BEVELS—See Bevels.

THERMOMETERS.

Tin Case.....per doz. 80c@$1 25
Wood Back..... " $2.00@12 00
Glass..... " 12 00

TIES.

Bale.
Single Loop.....80&5%
All other kinds.....70%
Cow—See "Chains."

TOOLS, SAW.

Disston's Universal.....40%
Miniature.
Smith & Hemenway.....25%

TRAPS.

Fly.
Ballon.....per doz. $1 25
Harper's..... " 1 35
Game.
Newhouse.....40&10%
New Victor.....70&10%
Mole.
Reddick's.....per doz. $6 00
Mouse and Rat.
Wood Choker ..per doz. holes $0 13
Tin Choker..... " " 75
Delusion.....per dos. 1 15
Marty Rat..... " 6 25
Marty Rat Imitation. " 3 50
Marty Mouse..... " 3 00
Marty Mouse Imitation " 2 00
Hold-em, wire rat.... " 3 75

TROWELS.

Brick.
Clover Leaf.....30%
Brade's.....15&5%
Disston's.....30%
Rose's.....20%
Plasterers'.
Clover Leaf.....40%
Disston's.....25%
W. & McP.....25%

TRUCKS.

Bag.....each, $2 75
Handy..... " 1 85
Warehouse.....50&10%
No..... 1 2 3
Half Ironed..... $3.00 3.85 5.50
Full Ironed..... 3.45 4.50 6.45

TUBS, WASH

Standard, Wood Ex.
Nos..... 2 1 large
Per doz.....$5.00 6.00 7.00 9.50
Dowell.
Per doz..... 5.35 6.35 7.00 9.50
Cedar.
Per doz.... 6.10 7.10 7.90 10.80
Indurated.
Per doz..... 8.55 9.45 10.80 13.50
Galvanized.
No..... 1 2 3
Per doz.....$6.00 6.75 7.75

TWINE.

Per lb.
3-ply Cotton Wrapping 25c
4 " " " 25c
" " Extra Wrapping.....27c
4 " " " Hvy. Wrapping 25c
4 " " Wrapping on tubes....27c
3 " " " " cones.....25c
4 " " " " " 25c
India Hemp, ¼-lb. balls 19c
" " ½-lb. " 18c
" " ¼-lb. " .....doz. 75c
2-ply Jute, ½-lb. " 14c
3-ply Jute, ½-lb. " 13c
Jute Wrapping, ½-lb. balls.....14c
Jute Wool, 1-lb. balls.....9½c
Seins.
Nos..... 9 12 15
Soft.....per lb 26½ 26 25
Med..... " 26½ 26 25
Hard..... " 27 26½ 26
Staging, ½-lb. ball, size 21.....26½c
" " " " 24.....26c
" " " " 27.....26c
Bagging " " 23c
3-p y "B" in hanks 18c
4- " "B" " 18c
3 " "A" " 27c
3 " Silver Finish, in hanks...37c
Fodder or Lath.
130 strand.....6½c
200 strand.....—c

VISES.

Phœnix.....30%
Phœnix Oval Slide.
Inches..... 2½ 3 3½ 4½
Each..... $1.25 1.50 1.85 2.75
Parker's Parallel.....18&20%
Parker's Victor.....15%
Parker's Combination.....75%
Solid Box.....40&5%
Adams' Mechanics'.....each 2 50
Williamson's Universal.....60%

WARE.

Stove Hollow Ware.
Plain or Unground.....50%
Ground Ware.....45%
Enameled Ware.....33⅓%
Country Hollow Ware, per 100 lbs. $3 00
White Enameled Ware.
Maslin Kettles.....60&10%
Covered Ware.
Tin'd and Turn'd.....35&10%
Enameled.....45&10%
Glue Pots.
Tinned.....25%
Enameled.....30%
Enameled.
Cherry Blossom and Chrysolite..50%

WASH BOARDS—See Boards.

WASHERS.

Standard O G. cast iron . . .per lb. 2½c
Wrought iron in bulk, per lb :
In. ½ ⅝ ¾ ⅞ 1
9c 6½c 5c 4½c 4½c 4½c 3½c
Wrought steel in 5-lb. boxes, per lb.:
In. ½ ⅝ ¾ ⅞ 1
10c 7c 6c 5½c 5c 5c 4½c

WASHING MACHINES—
See Machines.

WEDGES.

Ax.....per doz. $0 30
Galling.....per lb. 10½
Saw..... " 8½

WEANERS.

Calf.
Fuller's, per doz.....$2 00 to $2 50
Tyler's Safety, per doz 1 85 to 2 40
Carroll's, per doz..... 3 00 to 3 75
Standard, per doz..... 3 00
Hoosier, per doz..... 3 50 to 4 60

WEIGHTS.

Hitching.....per lb. 2½c
Sash—f.o.b. Chicago....pr ton, 26 50

WHEEL BARROWS.

Common Railroad.....per doz. $17 00
Heavy Railroad..... " 24 00
Panama Steel Tray.... " 39 00
Klondike Steel Tray.. " 28 00

WHEELS.

Corundum.....70&10&5%
Emery.....75&5%
Well. Inches.. 8 10 12 14
Per doz..... $2.40 3.25 4.00 6.00

WIRE.

Barbed. Painted. Galv'd
Carloads . . per 100 lbs. $2.65 $2.95
Less than car " 2.70 3.00
Brass.
In coils.....20%
In 1-lb. spools, new list.....50%
Broom—Tinned . . . 60&10&10&10%
Cable—Same price as Barbed Wire.
Copper.
In coils.....20&10%33⅓%
1-lb. spools, new list.....50&10%
Fence—Smooth.
Nos. 6 to 9, An'eal'd, pr 100 lbs. $2 30
Nos. 6 to 9, Galv'd.. " 2 60
Hair—New List.....50%
Market.
Bright, full bdles.....70&5%
Bright, broken bdles.....70%
Coppered, full bdles.....70%
Coppered, broken bdles.....65&10%
Tinned, full bdles.....75&5%
Tinned, broken bdles.....65&10%
Picture—In coils . . . . 80% @80&10%
In 5-lb. spools.....per lb.....26c
Plain—Small lots..... $2 10
Car lots..... 2 05
Small spools 5c per 100 higher

WRENCHES.

Acme Standard.....60%
Alligator No. 1.....85cnet
Always Ready.....50%
Coe's Standard.....40&10&5%
Agricultural.....75&5%
Ellis Adjustable.....25%
Malleable "S".....per lb. 08c
Malleable..... " 08c
Stillson Pipe.....70%

BEMIS & CALL'S WRENCHES.

Improved Adjustable S nut.....40%
Improved Adjustable S pipe 40%
Briggs' Pattern nut.....40%
Combination Bright .....40&10%
Combination Black.....40, 10 & 5%
Steel Handle nut.....50%
Merrick Pattern nut.....50%

WRINGERS.

No. 22, Guarantee....per doz. $32 50
No. 110, Guarantee.... " 32 50
No. 110, Brighton..... " 23 50
No. 110, Bicycle..... " 31 50
No. 500, Royal..... " 32 50
No. 350, Universal..... " 28 00
No. 300, Novelty..... " 28 00
No. 310, Keystone..... " 28 00
No. 100, Rival..... " 23 50

ADVERTISERS' INDEX.

ALPHABETICAL LIST.

American Sheet & Tin Plate Co..... 48
American Stove Repair Works..... 47
Armor Clad Mfg. Co..... 48
Armstrong-Blum Mfg. Co..... 55
Auld & Conger Co..... 54
Avery Stamping Co..... 1
Badger Steel Roofing & Corrugating Co 54
Baker, McMillen Co..... 56
Bassett & Presley Co..... 49
Bemis & Call Hardware & Tool Co.... 59
Berger Bros. Co..... 55
Berger Mfg. Co..... 52
Bertsch & Co..... 55
Bishop Hardware Co..... 54
Blick-Williams Co..... 59
Boss Washing Machine Co..... 61
Boynton Furnace Co..... 7
Brammer, H. F., Mfg. Co..... 61
Brauer, A. G., Supply Co..... 47
Burt Mfg. Co..... 45
Burton, W. J., Co..... 64
Butler Bros..... 58
Canton Art Metal Co..... 53
Canton Mfg. Co..... 54
Carver File Co..... 1
Champion Steel Range Co..... 6
Clark, Quien & Morse..... 52
Clayton & Lambert Mfg. Co..... 55
Cleveland Castings Pattern Co..... 47
Cleveland Nickel Works..... 47
Columbus Bolt Works..... 1
Conners, Wm., Paint Mfg. Co..... 1
Cope, Geo. W., Stove Pattern Wks... 47
Cortright Metal Roofing Co..... 53
Culter & Proctor Stove Co..... 3
Dairy Queen Churn Co..... 46
Delphos Mfg. Co..... 54
Denning Wire & Fence Co..... 57
Detroit Heating & Lighting Co..... 10
Dieckmann, Ferdinand..... 53
Disston, Henry & Sons..... 56
Dixon, Jos., Crucible Co..... 45
Dries & Krump Mfg. Co..... 55
Droescher, S. R..... 1
Electra Lightning Rod Co..... 60
Eller Mfg. Co..... 55
Enterprise Foundry & Fence Co..... 57
Enterprise Mfg. Co..... 68
Evans Stamping & Plating Co..... 47
Follansbee Bros. Co..... 64
Forest City Foundry Co..... 6
Friedley-Voshardt Co..... 51
Garner Heating Co..... 12
Gerock Bros. Mfg. Co..... 53
Globe Ventilator Co..... 64
Green Co., A. H..... 59
Green Foundry & Furnace Works... 8
Griffin Mfg. Co..... 58
Harrington & King Perforating Co ... 54
Haynes-Langenberg Mfg. Co..... 9
Hemp & Co..... 48
Henry & Scheible Co..... 10
Hooper, C. N..... 58
Howes Co., S. M..... 57
Hungerford, U.T., Brass & Copper Co. 48
Hussey & Co..... 55
Ideal Epworth Acetylene Co..... 10
Iowa Hdw. Mutual Ins. Assn..... 46
Interstate Manufacturing Co..... 11
Iwan Bros..... 60
Keighley, Metal Ceiling Co., S..... 52
Kelsey Heating Co..... 2
Kimball Bros. Co..... 59
La Crosse Steel Roofing Co..... 51
Lalance & Grosjean Mfg. Co..... 62
Lawson Mfg. Co..... 1
Lufkin Rule Co..... 56
Maher & Son Lightning Rod Co..... 60
Manufacturers' Stove Repair Co..... 47
March-Brownback Stove Co..... 7
Martcross Co..... 60
Merchant & Evans Co..... 51
Meyer, & Bro. F. Co..... 13
Michigan Safety Furnace Pipe Co.... 13
Milwaukee Artistic Metal Ceiling Co. 51
Modern Improvements Mfg. Co..... 48
Monitor Stove & Range Co..... 4
Monroe Foundry & Furnace Co..... 11
Mueller, L. J., Furnace Co..... 9-11
National Machine & Stamping Co..... 54
National Sheet Metal Roofing Co..... 54
Niagara Machine & Tool Wks..... 55
Nickel Plate Stove Polish Co..... 13
North Bros. Mfg. Co..... 59
Obermayer, S. Co..... 47
Paul Richard..... 48
Paxton & Gallagher Co..... 46
Peck, H. E..... 44
Pittsburgh Steel Co..... 57
Pritchard-Strong Co., The..... 62
Pullman Mfg. Co..... 1
Quincy Pattern Co..... 47
Ralt & Co., Walter S..... 5-10
Robinson Mfg. Co., J. M..... 63
Rock Island Tool Co..... 58
Rotary Washing Machine Co..... 60
Royal Mfg. Co..... 59
Safety Door Hanger Co..... 1
Schneider & Trensamp Co..... 14
Schollhorn & Co., Wm..... 57
Schwab, R. J. & Sons Co..... 12
Smith & Anthony Co..... 6
Smith & Hemenway Co..... 59
Smith Stove Co., Chas..... 12
Sperry, D. R. Co..... 48
Standard Horse Nail Co..... 57
Standard Register Co..... 9
Star Enameling & Stamping Co..... 64
Star Expansion Bolt Co..... 64
Stevens, F. B..... 47
Stove & Range Co. of Pittsburgh..... 2
Stuber & Kuck..... 64
Sycamore Wagon Works..... 59
Sykes Steel Roofing Co..... 54
Sullivan-Geiger Co..... 64
Tanner & Co..... 50
Troy Nickel Works..... 47
Turner Brass Works..... 55
Twentieth Century Heating & Ventilating Co..... 8
Uno Ventilator Co..... 54
Vedder Pattern Works..... 47
Ward-Dickey Steel Co..... 64
Watson, James H. Co..... 52
Weiss, H. & Co..... 55
Weller Pattern Co..... 47
Wheeling Corrugating Co..... 50
Whitacre, J. E. Mfg. Co..... 64
White Lily Mfg. Co..... 60
Youngstown Furnace & Supply Co... 10
Zucker & Levett & Loeb..... 56

CLASSIFIED LIST.

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Ideal Epworth Acetylene Co., Waterloo, Iowa and Johnstown, Penna

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Iwan Bros., Streator, Ill

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Boynton Furnace Co., Chicago, Ill

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Berger Bros. Co., Philadelphia, Pa

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Columbus Bolt Wks., Columbus, O
Star Expansion Bolt Co., New York, N.Y

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Pritchard-Strong Co., Rochester, N. Y.

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Stuber & Kuck, Peoria, Ill

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Delphos Mfg. Co. Delphos, Ohio

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Griffin Mfg. Co., Erie, Pa
Lawson Mfg. Co., Chicago, Ill.
North Bros. Mfg. Co., Philadelphia, Pa
Pullman Mfg. Co., Rochester, N. Y.

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Badger Steel Roofing & Corrugating Co., La Crosse, Wis
Berger Mfg. Co., Canton, O
Burton, W. J. Co., Detroit, Mich
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Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Friedley-Voshardt Co., Chicago, Ill
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Watson Co., James H., Bradley, Ill.
Wheeling Corrugating Co., Wheeling, W. Va.

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Berger Bros. Co., Philadelphia, Pa

Conductor Pipe

Badger Steel Roofing & Corrugating Co., La Crosse, Wis
Bassett & Presley Co., Cleveland, O
Berger Mfg. Co., Canton, O
Canton Mfg. Co., Canton, O
Cassens Mfg. Co., Edwardsville, Ill
Clark, Quien & Morse, Peoria, Ill
Eller Mfg. Co., Canton, O
Friedley & Voshardt, Chicago, Ill
La Crosse Steel Roof. Co., La Crosse, Wis
Watson Co., James, Bradley, Ill

Conductor Pipe Machinery

Armor-Clad Mfg. Co., Canton, O.

Copper, Sheet, Plate and Roll

Bassett & Presley Co., Cleveland, O
Hussey & Co., E. G., Pittsburg, Pa

Copper and Brass

Hungerford, U. T., Brass & Copper Co., New York, N. Y

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Denning Wire & Fence Co., Cedar Rapids, Ia

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Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Watson Co., James, Bradley, Ill

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Badger Steel Roofing & Corrugat'ng Co., La Crosse, Wis

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Dries & Krump Mfg. Co., Chicago, Ill
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Smith & Hemingway Co., New York, N.Y

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Sullivan-Geiger Co., The Indianapolis, Ind.

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Bassett & Presley Co., Cleveland, O
Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
La Crosse Steel Roof Co., La Crosse, Wis
Milwaukee Artistic Metal Ceiling Co., Milwaukee, Wis
Watson Co., James, Bradley, Ill
Whitacre, J. E. Mfg. Co., Rockford, Ill
Wheeling Corrugating Co., Wheeling, W. Va

Elbows—Conductor Pipe

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Diener, Geo. W. Mfg. Co., Chicago, Ill
Eller Mfg. Co., Canton, O
Milwaukee Artistic Metal Ceiling Co. Milwaukee, Wis.
Wheeling Corrugat'g Co., Wheeling, W. Va

Electro Plating Outfits

Zucker & Levett & Loeb Co., New York

Elevators

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Nickel Plate Stove Polish Co., Chicago, Ill

Enameled Ware

Lalance & Grosjean Mfg. Co., Chicago, Ill
Star Enameling & Stamping Co., Pittsburgh, Pa

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Denning Wire & Fence Co., Cedar Rapids, Ia
Enterprise Foundry & Fence Co., Indianapolis, Ind.
Pittsburgh Steel Co., Pittsburgh, Pa

Files

Carver File Wks, Philadelphia, Pa
Disston, Henry & Sons, Philadelphia, Pa

Forming Rolls

Bertsch & Co., Cambridge City, Ind
Niagara Machine & Tool Works, Buffalo, N. Y

Foundry Supplies

Obermayer, S. Co., Cincinnati, O
Stevens, F. B., Detroit, Mich

Furnace Cement

Connors Paint Mfg. Co., Wm., St. Louis, Mo

Furnaces—Hot Air

Boynton Furnace Co., Chicago, Ill
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Garner Heating Co., Lansing, Mich
Green Fdy. & Furn. Wks., Des Moines, Ia
Haynes-Langenberg Mfg. Co., St. Louis, Mo
Henry & Scheible Co., Cleveland, O
Kelsey Heating Co., Syracuse, N. Y
March-Brownback Stove Co., Pottstown, Pa
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Ralt, Walter S. & Co., Chicago, Ill
Schwab, R. J. & Sons Co., Milwaukee, Wis
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Smith, Chas. & Co., Chicago, Ill
Standard Register Co., Cleveland, O.
Stove & Range Co of Pittsburgh, Pittsburgh, Pa
Twentieth Century Heating & Ventilating Co., Akron, Ohio
Youngstown Furn. & Supply Co., Youngstown, O

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Clayton & Lambert Mfg. Co., Detroit, Mich
Turner Brass Works, Sycamore, Ill

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Green Fdy. & Furn. Wks., Des Moines, Ia
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Mueller, L. J. Furn. Co., Milwaukee, Wis

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Stove & Range Co. of Pittsburgh, Pittsburgh, Pa

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Ideal Epworth Acetylene Co., Waterloo, Iowa, & Johnstown, Penn

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Paxton & Gallagher Co., Omaha, Neb

Grinders

Royal Mfg. Co., Lancaster, Pa

Hangers—Door

Safety Door Hanger Co., Ashland, O

Hangers—Garment

Pullman Mfg. Co., Rochester, N.Y

Hardware Delivery Wagons

Sycamore Wagon Wks., Sycamore, Ill

Hardware Jobbers

Clark, Quien & Morse, Peoria, Ill
Paxton & Gallagher Co., Omaha, Neb

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Bemis & Call Hardware & Tool Co., Springfield, Mass
Butler Bros., Chicago, Ill
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Smith & Hemenway Co., New York, N. Y

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Sperry, D. R. & Co., Batavia, Ill

Hones

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Standard Horse Nail Co., New Brighton, Penna

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North Bros. Mfg. Co., Philadelphia, Pa

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Iowa Hdw. Mutual Ins. Assn., Mason City, Iowa

Iron Enamel

Nickel Plate Stove Polish Co., Chicago, Ill

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Lalance & Grosjean Mfg. Co., Chicago, Ill
National Machine & Stamping Co. Detroit, Mich

Lanterns

Berger Mfg. Co., Canton, O
Pritchard-Strong Co., Rochester, N. Y

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Denning Wire & Fence Co., Cedar Rapids, Ia
Enterprise Foundry & Fence Co., Indianapolis, Ind

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Ideal Epworth Acetylene Co. Waterloo, Iowa and Johnstown, Penna

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Detroit Heating & Lighting Co., Detroit, Mich

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Electra Lightning Rod Co. Cresco, Ia
Maher & Son Lightning Rod Co., Preston, Ia

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Enterprise Mfg. Co. of Pa., Philadelphia, Pa

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Barton, W. J. Co., Detroit, Mich
Cortright Metal Roofing Co., Chicago, Ill., Philadelphia, Pa
Nat'l Sheet Metal Roofing Co., Jersey City, N. J

Miters

Whitacre, J. R. Mfg. Co., Rockford, Ill

Nails and Tacks—Copper

Hungerford, U. T., Brass & Copper Co., New York, N. Y
Hussey & Co., C. G., Pittsburg, Pa

Nickel Plating Outfits

Zucker & Levett & Loeb, New York, N.Y

Nuts

Columbus Bolt Works, Columbus, O

Oil Cans

Delphos Mfg. Co. Delphos, Ohio

Paints and Paint Specialties

Connors, Wm., Paint Mfg. Co., Troy, N. Y
Dixon, Jos. Crucible Co., Jersey City, N.J

Pencils

Dixon, Jos. Crucible Co., Jersey City N.J

Perforated Metal

Harrington & King Perforating Co., Chicago, Ill

Pipe—Furnace

Meyer & Bro. Co., F. Peoria, Ill

Pipe—Wall

Michigan Safety Furnace Pipe Co., The Detroit, Mich

Pliers

Schollhorn Co., Wm., New Haven, Conn

Plungers

Berger Bros. Co., Philadelphia, Pa

Polish—Metal

Nickel Plate Stove Polish Co., Chicago, Ill

Polish—Stove

Nickel Plate Stove Polish Co., Chicago, Ill

Pumps

Hess-Snyder Co., Massillon, O

Punches

Armstrong-Blum Mfg. Co., Chicago, Ill
Bertsch & Co., Cambridge City, Ind
Niagara Machine & Tool Works., Buffalo, N.Y
Robinson, Mfg. Co., J. M., Cincinnati, O
Schollhorn Co., Wm., New Haven, Conn

Putty—Stove

Connors, Wm. Paint Mfg. Co., Troy, N.Y

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Disston, Henry & Sons., Philadelphia, Pa
Carver File Wks., Philadelphia, Pa

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Smith & Hemenway Co., New York, N.Y

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Schwab & Sons Co., Milwaukee, Wis
Standard Register Co., Cleveland, O

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Columbus Bolt Works, Columbus, O
Hungerford, U.T., Brass & Copper Co., New York, N. Y

Roasters

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Auld & Conger Co., Cleveland, O

Roofing and Siding

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Roofing—Iron and Steel

American Sheet & Tin Plate Co. Pittsburgh, Pa
Berger Mfg. Co., Canton, O
Burton, W. J. Co., Detroit, Mich
Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Follansbee Bros. Co., Pittsburgh, Pa
Friedley & Voshardt, Chicago, Ill
La Crosse Steel Roof. Co., La Crosse, Wis
Nat'l Sheet Metal Roof. Co., Jersey City, N. J
Sykes Steel Roofing Co., Chicago, Ill
Wheeling Corrugating Co., Wheeling, W. Va

Roofing Cement

Auld & Conger Co., Cleveland, O
Connors Paint Co., The Wm., Troy, N.Y

Roof Paint

Dixon, Jos. Crucible Co., Jersey City, N.J

Rules

Lufkin Rule Co., Saginaw, Mich

Safety Thimbles

Paul, Richard, Cleveland, Ohio

Sash Balances

Pullman Mfg. Co., Rochester, N.Y

Saw Sets and Saws

Disston, Henry & Sons, Philadelphia, Pa
Smith & Hemenway Co., New York, N.Y

Screens—Perforated Metal

Harrington & King Perforating Co., Chicago, Ill

Screen Door Checks

Pullman Mfg. Co., Rochester, N. Y

Screws

Columbus Bolt Works, Columbus, O

Screw Drivers

North Bros. Mfg. Co., Philadelphia, Pa

Seamless Tubing—Brass & Copper

Hungerford, U. T., Brass & Copper Co., New York, N. Y

Seed Cleaners

Paxton & Gallagher, Omaha, Neb

Sharpeners

Royal Mfg. Co., Lancaster, Pa

Sheet Metal Ornaments

Gerock Bros. Mfg. Co., St. Louis, Mo

Sheet Metal Specialties

Armor-Clad Mfg. Co., Canton, Ohio

Shears

Bertsch & Co., Cambridge City, Ind
Niagara Machine & Tool Works, Buffalo, N. Y
Robinson, Mfg. Co., J. M., Cincinnati, O

Sheets—Black and Galvanized

American Sheet & Tin Plate Co. Pittsburgh, Pa
Berger Mfg. Co., Canton, O
Wheeling Corrugat'g Co., Wheeling, W. Va

Sheets—Corrugated

Sykes Steel Roofing Co., Chicago, Ill

Sheets—Planished

American Sheet & Tin Plate Co., Pittsburgh, Pa.
Follansbee Bros., Pittsburg, Pa
Ward-Dickey Steel Co., Indiana Harbor, Ind

Sheets—Steel

American Sheet & Tin Plate Co., Pittsburgh, Pa.
Follansbee Bros. Co. Pittsburgh, Pa
Tanner & Co. Indianapolis, Ind

Shelf Boxes

Green & Co., A. H., New York, N. Y

Shovels

Avery Stamping Co., Cleveland, O

Siding

Milwaukee Artistic Metal Ceiling Co. Milwaukee, Wis

Sifters

Stuber & Kuck, Peoria, Il

Skylights

Berger Mfg. Co., Canton, O
Burt Mfg. Co., Akron, O
Eller Mfg. Co. Canton, O
Sykes Steel Roofing Co., Chicago, Ill

Skylight Gearing

Weiss, H. Co., New York, N.Y
Sykes Steel Roofing Co., Chicago, Ill

Slate Roofing

Auld & Conger Co., Cleveland, O

Slating Nails

Hussey & Co., C. G., Pittsburg, Pa

Squares, Machinists'

Disston, Henry & Sons, Philadelphia, Pa

Stampings—Sheet Metal

Avery Stamping Co., Cleveland, O

Statuary

Gerock Bros. Mfg. Co., St. Louis, Mo

Stoves and Ranges

Champion Steel Range Co., Cleveland, O
Culter & Proctor Stove Co., Peoria, Ill
Monitor Stove & Range Co., Cincinnati, O
Schneider & Trenkamp Co., Cleveland, O
Smith & Anthony Co., Boston, Mass
Stove & Range Co. of Pittsburgh, Pittsburgh, Pa.
Van John Range Co., Cincinnati, O

Stove Cement

Dixon, Jos. Crucible Co., Jersey City, N J

Stoves—Gas

Stove & Range Co. of Pittsburgh Pittsburgh, Pa

Stove Mats

Stuber & Kuck, Peoria, Ill

Stove Patterns

Cleveland Castings Pattern Co., Cleveland, O
Cope Pattern, Geo. W. Wks., Detroit, Mich
Quincy Pattern Co., Quincy, Ill
Vedder Pattern Works, Troy, N Y
Weller Pattern Co. Quincy, Ill

Stove Pipe

Hemp & Co., St. Louis, Mo

Stove Pipe Thimbles

Stuber & Kuck, Peoria, Ill

Stove Polish

Nickle Plate Stove Polish Co., Chicago, Ill

Stove Putty

Connors Paint Mfg. Co., Wm., St. Louis, Mo

Stove Repairs

American Stove Repair Works, St. Paul, Minn
Brauer, A. G., Supply Co., St. Louis, Mo

Stove Trimmings

Cleveland Nickel Works, Cleveland, O

Sugar Kettles

Sperry, D. R. Co., Batavia.

Supplies—Foundry

Obermayer Co., S., Cincinnati, O
Stevens, F. B., Detroit, Mich

Supplies—Stove Dealers'

Brauer, A. G., Supply Co., St. Louis, Mo

Tacks

Hungerford, U. T., Brass & Copper Wks New York, N. Y

Tapes

Lufkin Rule Co., Saginaw, Mich

Technologist

Hooper, C. N. Dubuque, Iowa

Thermometers—Oven

Evans Stamping & Plating Co., Taunton, Mass

Tin—Perforated

Harrington & King Perforating Co., Chicago, Ill

Tinners' Tools

Auld & Conger Co., Cleveland, O
Berger Bros. Co., Philadelphia, Pa
Lufkin Rule Co., Saginaw, Mich
Niagara Machine & Tool Works, Buffalo, N. Y
Smith & Hemenway Co., New York N.Y

Tinplate

American Sheet & Tin Plate Co., Pittsburg, Pa
Bassett & Pressley Cleveland, O
Canton Art Metal Co., Canton, O
Eller Mfg. Co. Canton O
Follansbee Bros. Co., Pittsburgh, Pa
Merchant & Evans Co., Philadelphia, Pa
Tanner & Co. Indianapolis, Ind
Wheeling Corrugating Co., Wheeling, W. Va

Tinware Trimmings

Berger Bros. Co., Philadelphia, Pa
Butler Bros., Chicago, Ill

Tools, Etc.

Bemis & Call Hardware & Tool Co., Springfield, Mass
North Bros. Mfg. Co., Philadelphia, Pa
Rock Island Tool Co., Rock Island, Ill
Schollhorn Co., Wm., New Haven, Conn

Tools—See Carpenters' Tools

Tools—Linemen's

Smith & Hemenway, New York, N.Y

Tool Sharpeners

Royal Mfg. Co., Lancaster, Pa

Trowels

Avery Stamping Co., Cleveland, O
Disston, H. & Sons, Inc., Philadelphia, Pa
Griffin Mfg. Co., Erie, Pa

Tubing—Brass and Copper

Hungerford, U. T., Brass & Copper Co. New York, N. Y

Tubing—Heavy Tin

Dieckmann, Ferdinand, Cincinnati, O

Ventilators

Berger Mfg. Co., Canton, Ohio
Burt Mfg. Co., Akron, Ohio
Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Friedley & Voshardt, Chicago Ill
Globe Ventilator Co., Troy, N.Y
Merchant & Evans Co., Philadelphia, Pa
Pullman Mfg. Co., Rochester, N. Y
Uno Ventilator Co., Lynn, Mass

Vises—Automatic Swivel

Rock Island Tool Co., Rock Island, Il

Wagons

Sycamore Wagon Works, Sycamore, Ill

Wall Register—Fittings

Meyer & Bro., Co., F. Peoria, Ill

Washers

Columbus Bolt Works., Columbus, O

Washing Machines

Boss Washing Machine Co., Cincinnati, Ohio
Brammer, H. F., Mfg. Co., Davenport, Ia
Rotary Washing Machine Co., St. Louis, Mo
White Lily Mfg. Co., Davenport, Ia & Toledo, O

Wire Goods

Denning Wire & Fence Co., Cedar Rapids,
Pittsburgh Steel Co., Pittsburgh, Pa

Wrenches

Bemis & Call Hardware & Tool Co., Springfield, Mass

Wants and Sales

For Paid Yearly subscribers THE AMERICAN ARTISAN will insert under this head advertisements of six lines WITHOUT CHARGE for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they "READ THE ADVERTISEMENT IN THE AMERICAN ARTISAN."

BUSINESS CHANCES.

PATENTS Hubert E. Peck, 623 F. St., N. W., Washington, D. C., Consulting Expert in Patent Causes. U. S. and Foreign Patents. Send for leaflet on "Rejected Patent Application."

For Sale—Tinshop with a first-class set of tools, including one 8-foot Robinson cornice brake. Good location. Doing a fair business. Only two shops in town of 5,500. Will take cash or equivalent. Address M 34, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 14-ufn

For Sale—Hardware business in good growing county town in Michigan Is located in a rapidly improving and good consuming territory. Stock inventories about $6,000 and is well selected and desirable. New two story brick store 36 by 114. Prefer to sell both building and stock, but would rent for a term of years. Best of reasons for selling. Address M-32, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 13-3t

For Sale or Exchange—A first-class and good paying sheet metal shop. Work for as many men as you wish to employ. Good trade established in furnaces. Will sell right if taken soon. Other interests. Address N. H. Pool, Coldwater, Michigan. 13-3t

For Sale—One well drilling machine with horse power and necessary tools. If taken immediately $100 cash will buy it. In good condition. For further particulars address Marvin Hardware Co., Oregon, Wisconsin. 12-ufn

WANTED—A line of small and cheap furnaces for this climate Address George W. Schmitt Heating & Ventilating Co., Oakland, California.

For Sale (Cash)—A well assorted stock of hardware and steam fittings. Will invoice about $6,000. Also two story brick store, built for hardware, with dwelling rooms on second story. This is a strictly cash business and will bear investigation. Address A. W. L. Hardware, Mt. Jackson, Virginia. 5-30

For Sale—$3,500 stock of hardware, tinware and stoves; a good clean stock in good town in northwest Iowa; doing a good business; best of reasons for selling. Address M 15, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 11-3t

TINNERS' TOOLS.

Wanted—One No. 12 Wright's Improved Sheet Iron Folder, 30 inches. Must be in the best of condition. Quote lowest cash price. We have for sale one No. 2 Moore double seamer for $12.00 cash. In good condition. Address Lock Box 325, Saranac, Michigan. 14-2t

Wanted—Eight-foot cornice brake in good condition. State price and make. Address Huyck & Brodt, Washington, Kansas. 13-3t

For Sale—One set of tinner's tools. All in good condition. For particulars address John H. Weckerly, South Wayne, Wisconsin. 13-3t

Wanted—To buy one set of forming rolls 36 inches long to form 10-gauge steel and lighter. Address Henry Mergens, Shakopee, Minnesota. 12-3t

For Sale—A set of tinner's tools, including a Keene 6-foot cornice brake. Price $125. Address E. E. Philpott, Warsaw, Indiana. 12-3t

HELP WANTED.

Wanted, Tinner—A man with two or three years' experience at roofing and spouting; nearly all country work. Honest and sober. Single man preferred. Address C. C. Hall, Evansport, Ohio. 14-3t

Wanted—A first-class tinner and furnace man. One who can lay out and estimate from plans, and take charge of shop. Must be sober and reliable. Married man preferred. State age and wages wanted. Address 211 First Ave., Sterling, Ill. 14-3t

Wanted—A good tinner. Must be married and steady man. State wages wanted. Steady work the year round. Address Hoernel Hardware Co., Racine, Wisconsin. 14-3t

Wanted, Salesman—Who combines the necessary experience and ability to successfully sell both furnaces and stoves. Excellent territory and good compensation to the right man. Address Van Evera & Lewis Mfg. Co., Chicago. 14-2t

Wanted—A good, steady, industrious, all around tinner for both inside and outside work. To the right man we will give steady employment all year around. Wages $3.00 per day. Address M 30, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 13-3t

Wanted—A good all around young man to learn the tinner's and plumber's trade. Address M-29, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 13-2t

Where is the first-class tinner who wants a steady job? No lost time, no plumbing, steam fitting, windmills nor farm machinery. Give age and experience. No boozer wanted. Address Henry Sauer, Morrison, Illinois. 13-3t

Wanted at Once — First-class tinner who has some knowledge of heating and plumbing. Give references and wages in first letter. Address Lock Box 405, Mineral Point, Wisconsin. 13-2t

Salesman Wanted—To sell a household specialty. Has an established trade and is a ready seller at an exceptional good profit. Easily sold. Address M-27, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 13-2t

Wanted at Once—First-class tinner to take charge of shop. Must be able to do furnace and general job work. Steady job to the right man. Address O'Neill's Hardware, Fargo, N. D. 13-3t

Wanted—A good plumber and heating man. One with some knowledge of tinner's trade and willing to assist in store when required. Send references and state wages wanted. Steady work the year around. Address Hunter Bros., Cando, North Dakota. 13-3t

Wanted—A reliable cornice man, one who can lay out and estimate from plans. Steady work to a sober man who is not afraid of work. Address M 24, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 12-3t

Wanted—A hardware clerk and tinner's helper. One with some experience preferred. State experience, salary wanted and references in first letter. Address M 23, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 12-3t

Wanted — A first-class tinner and plumber; one that understands farm machine work; young German married man preferred; state age, etc., in letter, and the right man can have a good job for years to come. Address Schilling Bros., State Center, Iowa. 11-3t

SITUATIONS WANTED.

Situation Wanted—By a good all around retail hardware man able to do tin work, furnace work, some plumbing and hot water heating, pump and windmill work, and gasoline engine repairing. Am a good salesman and not afraid to work. Married and no booze fighter. I want a steady job, by the year. Furnish the best of references. Kindly state wages. Address M 35, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago.

Situation Wanted—As tinner. Understands roofing spouting, hot water heating and jobbing. Want a good steady job with some good reliable firm in Kansas City, or state. Am married, strictly honest and sober. In answering kindly state wages paid and how long job will last if both parties agree. Address E. H. May, Bedford, Ohio, Box 537. 14-3t

Situation Wanted—By a tinner with ten years' experience in both inside and outside work. A good mechanic and also able to lay out his own work. Address M-36, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 14-1t

Situation Wanted—By a general all around tinner and furnace man with some experience at plumbing. Am strictly temperate. Can furnish best of references. A steady, permanent place only would be considered. Address "Tinner," 912 Maple St., Atlantic, Iowa. 14-3t

Situation Wanted—By an expert furnace man and tinner for an inside job. 25 years experience. Can estimate work and manage shop. Sober, industrious married man. State wages and full particulars. Address E. C., 111 West Washington St., Winchester, Indiana. 14-3t

Situation Wanted—As manager or clerk in some good retail hardware store. Have been in the hardware business for the past twenty years. Have had experience from the tinshop to manager of a $10,000 stock. Address W. R. Jones, Gibson City, Illinois. 13-2t

Position Wanted—By an A1 furnace man and tinner. Am able to take charge of shop. No less than $3.00 per day will be considered. Address M-31, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 13-3t

Situation Wanted—By tinner of seven years' experience. Would like position as clerk in retail hardware store. Am 28 years old and strictly sober. Address M-25, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 13-3t

Situation Wanted—A young tinner of three years' experience would like a position where I can finish learning the trade. Can do hot air heating and some plumbing. Am no boozer and a willing worker. Address M 22, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 12-3t

Wanted—A steady job in a good tinshop by competent sheet metal worker. Prefer inside work. Can draft patterns and lay out work. Strictly sober and trustworthy. 43 years of age. Address G. H. Schefstrom, Belding, Michigan. 12-3t

Situation Wanted—By a practical tinner and furnace man. Also have had some experience at plumbing and hot water heating. Am a young man 28 years and no boozer. Only a steady position considered. Address C. F. Bemis, 122 W. 32d St., Minneapolis, Minnesota. 12-3t

Wanted—Steady job as tinner, helper or general man in hardware store or cornice shop. State wages with full information. Best of references. Address Jack the Tinner, Gage, Oklahoma. 12-3t

Situation Wanted—By a first-class tinner. Can give the best of references. Can make good anywhere. Oklahoma preferred. Address 503 Second Ave., Ardmore, Oklohoma. 12-3t

SITUATION WANTED — Experienced tinner desires good permanent position where good services and full knowledge of general job and furnace work will be appreciated. No plumbing or steamfitting. Address stating wages and full details. Address M-14, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 10-ufn

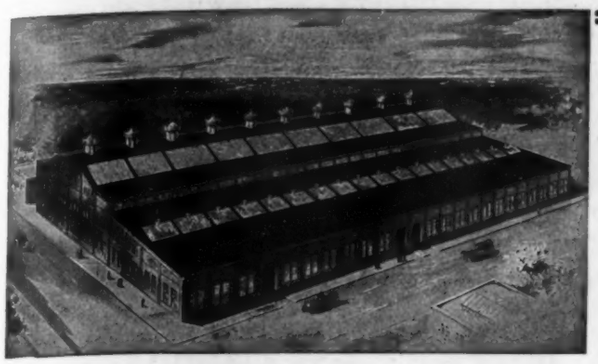
SPECIAL NOTICES.

WANTED.

Manufacturers or jobbers agency line for Oklahoma territory. Address "Jobber," care of THE AMERICAN ARTISAN, 69 Dearborn street, Chicago. 12-3t

TWO STOVE OR HARDWARE SALESMEN WANTED.

to sell Mica to the retail trade. Very easy to sell. Samples carried in pocket. Commission 10%. Mica delivered free. Address S. F., care of THE AMERICAN ARTISAN, 69 Dearborn street., Chicago. 13-3t



This Foundry

is noted for its good work and its good ventilation. It belongs to the Norberg Manufacturing Co., Milwaukee, Wis., who equipped it with the very best and most modern features for the production of the highest grade foundry work. Consequently forty-eight 30 and 48 inch

Burt Ventilators

with sliding sleeve dampers were selected and are now being installed, as shown in the illustration. The owners wanted the best ventilation and they got it.

Burt Ventilators are not only strictly high grade in every respect, but are made with improvements and features which no other ventilators possess. Patent sliding sleeve dampers, easily adjusted, storm and dust proof, open or shut, and collect no dust. Made with glass tops if desired to act as sky lights, and by use of a damper ventilator can be closed and yet light is not shut off. Can be arranged with fusible link connection so that damper will close automatically in case of fire.

Notice Sliding Sleeve Damper. Patented.

Send for our new 80-page catalogue giving fine illustrations of mills, shops, foundries and residences where Burt Ventilators are in successful use.

The Burt Mfg. Co.,

650 Main Street Akron, Ohio.

Largest Manufacturers of Oil Filters and Exhaust Heads in the World.
George W. Reed & Co., Montreal, Sole Manufacturers of "Burt" Ventilators for Canada.

DEAD OR SLOW MOVING STOCK?

If you have a large lump of hardware merchandise, that you want disposed of *quickly* at a *sacrifice*, address "Quick Sales," care THE AMERICAN ARTISAN and get our proposition. It will be optional with you as to whether you are known or not known in the sale.

SPECIAL NOTICES.

Situation Wanted

As traveling salesman. Would prefer Southern Iowa or Northern Missouri. Extensive acquaintance with trade. Address K-31, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 9-2t

SALESMAN WANTED

To carry a good line of Stove Polish as a side line. Cash commission basis. Address for full particulars, K-25, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 6-6t

FOR SALE

A fine set of Oak Stove Patterns, wood and iron. Almost new. Complete with fallow boards, 14, 16, 18 and 20 inches. Price low for quick sale. Address, BARSTOW STOVE CO., Providence, Rhode Island. 13-4t

FOR SALE

Tin and furnace shop, first-class tools as good as new, 1 horse, 2 wagons, 1 O. K. Steel Brake (new). Will invoice $1,200. Reasons for selling, going out of city. Will sell for cash only. Address Lake View Tin & Furnace Co., 1871 E. 119th St. S. E., Cleveland, Ohio. 9-ufn

PROPOSALS FOR INDIAN SUPPLIES.—Department of the Interior, Office of Indian Affairs, Washington, D. C. March 16, 1908. Sealed proposals, plainly marked on the outside of the envelope: "Proposal for rubber goods, shoes," etc., as the case may be, and addressed to the "Commissioner of Indian Affairs, Washington, D. C.," will be received at the Indian Office until 2 o'clock p. m. of Tuesday, May 5, 1908, and then opened, for furnishing the Indian service with rubber goods, shoes, hardware, and medical supplies. Sealed proposals, plainly marked on the outside of the envelope: "Proposal for enameled ware, furniture," etc., as the case may be, and addressed to the "Commissioner of Indian Affairs, Washington, D. C.," will be received at the Indian Office until 2 o'clock p. m. of Thursday, May 7, 1908, and then opened, for furnishing the Indian service with enameled ware, lamps, furniture, bedding, stoves, agricultural implements, paints, oils, glass, tinware, wagons, harness, leather, shoe findings, saddlery, etc., school supplies, and a long list of miscellaneous articles. Bids must be made out on Government blanks. Schedules giving all necessary information for bidders will be furnished on application to the Indian Office, Washington, D. C.; the U. S. Indian Warehouses at New York City, Chicago, Ill., St. Louis, Mo., and Omaha, Nebr. The Department reserves the right to reject any and all bids, or any part of any bid. F. E. LEUPP, Commissioner.

WANTED

Tinners accustomed to making furnace pipe and fittings. Good opening for a few first-class men. Address, LENNOX FURNACE CO., Marshalltown, Iowa. 13-2t

The expense and annoyance of painting will not recur every year or two if you use

Dixon's Silica-Graphite Paint

the "Proven Shield for Steel Work." Durability records in all climates; write for a few.

Joseph Dixon Crucible Co. Jersey City, N. J.

FOR SALE

To Hardware Merchants only—purchases limited to $3,000 in any one year—Fire Insurance policies worth one hundred cents on the dollar every day in the year, and at 40% less cost than you have been paying your Stock Companies. Isn't that a saving worth while? Think it over. If you have any doubt as to the quality of the Insurance we furnish, we can give you satisfactory references. Write for full particulars to-day.

Iowa Hardware Mutual Insurance Association

MASON CITY, IOWA

S. R. MILES, President — A. R. SALE, Secretary

SPECIAL NOTICES.

WANTED

A good stock of hardware or hardware and implements in exchange for an improved farm. Give amount of stock with price and description of real estate with first letter. Address K-40, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 13-2t

Plumbing and Tinshop for Sale

In thriving 1800 town. Practically no competition and new public sewerage contract just let. Good furnace and repair trade. Will suit any practical plumber and tinsmith. Requires about $1,000 capital. Address Box 17, Evart, Michigan. 14-2t

Do You Want a Chicago Office?

MANUFACTURER OF HEATING APPARATUS HAVING AMPLE OFFICE AND STORAGE ROOM SITUATED ON RAILROAD SIDING IN DOWNTOWN DISTRICT, WOULD SUBLET PART OR REPRESENT REPUTABLE MANUFACTURERS. VERY REASONABLE TERMS FOR IMMEDIATE ARRANGEMENT. ADDRESS "MANUFACTURER," CARE OF THE AMERICAN ARTISAN, 69 DEARBORN ST., CHICAGO. 13-2t

You're Selling Churns—

Are They the Best?

The churn that sells the best, and, incidentally, brings the most profits, is the one that churns the best butter at the least expense of time and energy. Numerous demonstrations held at various agencies, experimental stations, etc., have proved that

The Dairy Queen Churn

makes and gathers butter in two to three minutes—butter that is sweet, granulated, pure. Extensively advertised. Sells on sight. Every user becomes a satisfied customer. Fully guaranteed. Exclusive agency in unoccupied territory. Write for catalog 18 and special agents' prices.

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Prices Are Lowest. Prompt Shipment

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Cleveland Nickel Works, Cleveland, Ohio

MANUFACTURERS OF

"SUPERIOR" Improved Exhaust Tumbling Mills, Dust Arresters, Hard Iron Stars, Wrought Iron Chaplets, Plain and Tinned, Stove Rods, Furnace Rods, Chair Rods, Stove Scrapers and **all kinds of NICKEL PLATED STOVE TRIMMINGS.** Send for catalogue.

YES—YOU CAN SAVE DOLLARS

By sending me your orders for Foundry Supplies. **Stevens' Stove Plate Facings and Stevens' Genuine East India Plumbago** will give you clear and smooth face plates, and where ornamentations occur they will be well-defined.

Stevens' Polishing and Plating Compositions will do the rest. Write for catalog. Prompt Shipment.

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THE RIGHT KIND
of Oven Thermometer is

THE "Acme"

THE "Acme"

MADE BY **EVANS STAMPING AND PLATING CO.** TAUNTON, MASS.
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when thinking of foundry supplies to think of OBERMAYER. Quality, price, reliability—all the attributes of perfect foundry supplies are expressed by one word—OBERMAYER.

The name OBERMAYER stands for the best that can be had for the price, and every article, no matter what it is, is guaranteed to satisfy you—or your money back.

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PROMPT SHIPMENTS

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ST. PAUL, MINN.

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DESIGNS and ESTIMATES FURNISHED FOR ALL KINDS OF STOVE PATTERNS

QUINCY, ILL.

PATTERNS

For Stoves and Heaters

The Cleveland Castings Pattern Co.

CLEVELAND, OHIO

The GEO. W. COPE **STOVE PATTERN WORKS** Cor. Brush & Woodbridge Streets DETROIT, MICHIGAN

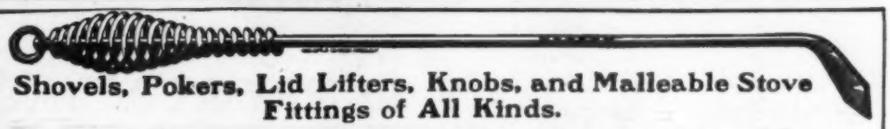
PATTERNS

For Stoves and Heaters
First-Class in Wood and Iron

Vedder Pattern Works, Troy, N. Y.
Established 1855

QUINCY PATTERN Co
IRON & WOOD
STOVE PATTERNS
QUINCY, ILL.

Alaska STOVE TRIMMINGS



Shovels, Pokers, Lid Lifters, Knobs, and Malleable Stove Fittings of All Kinds.

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Our Stock Comprises
COPPER RIVETS & BURS
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COPPER TACKS
UPHOLSTERY NAILS
BRASS & ZINC OILERS
ETC., ETC.

STOCK SHEET, SHOWING FULL ASSORTMENT ON HAND, SENT ON REQUEST.

Adjustable
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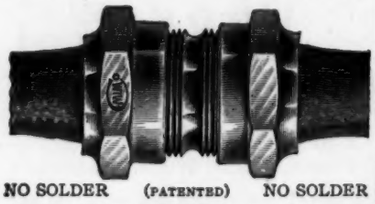

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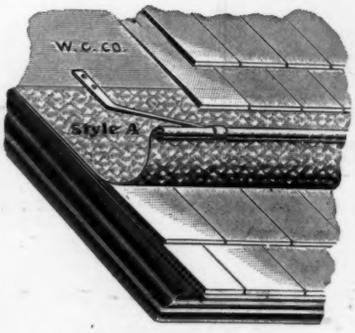

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Bead . . .	⅝ in.	⅝ in.	⅝ in.
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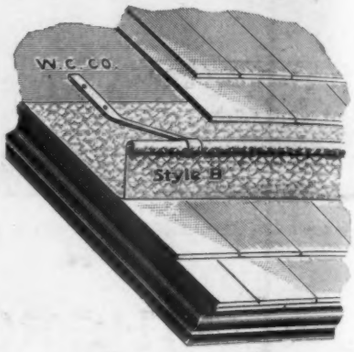

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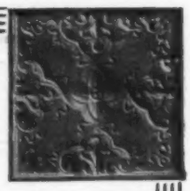

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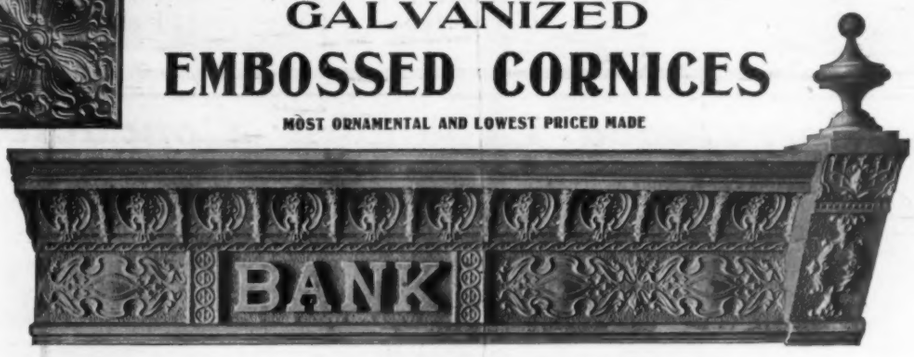

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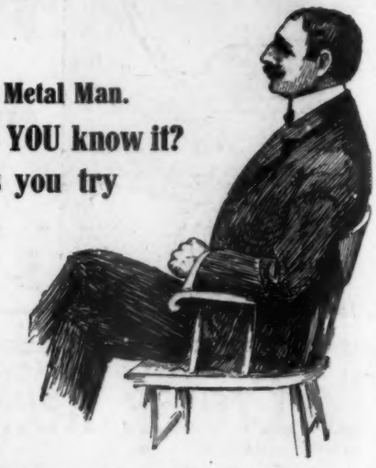

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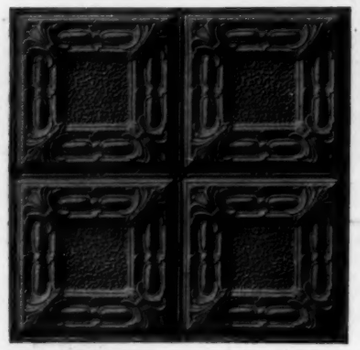

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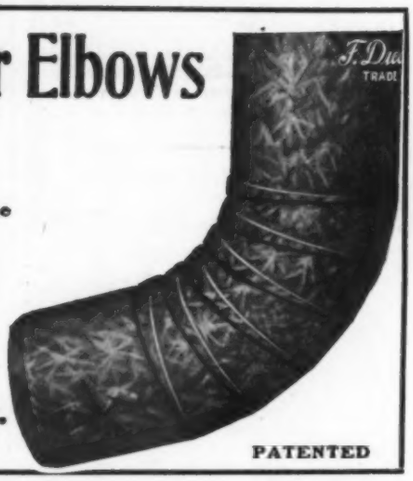

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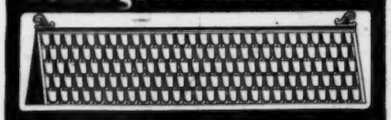

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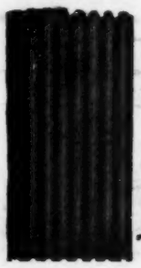

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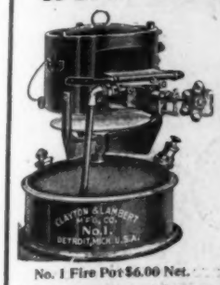

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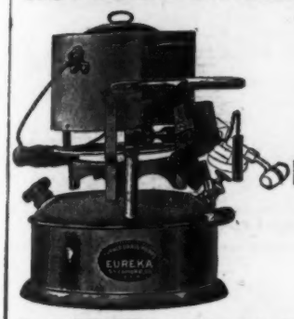

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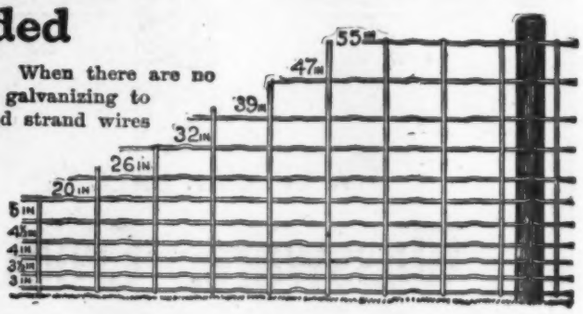
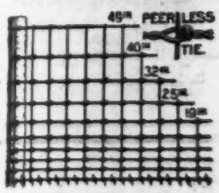
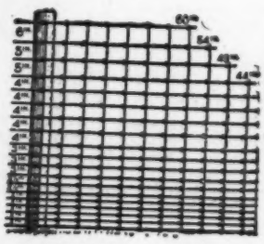


Pittsburgh Steel Co., Pittsburgh, Pa.

THE DENNING FENCE



For yard and pasture has no equal. Our Peerless Cabled Fence with barb wire in the bottom turns hogs, absolutely. We beat the world on Poultry Fence. We make perfect Barb Wire. We ship mixed cars Woven Fence, Barb Wire and Nails.



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THE DENNING WIRE & FENCE CO., Cedar Rapids, Iowa.

IRON FENCES

Also ORNAMENTAL WIRE FENCES

Finest at lowest price. Guaranteed

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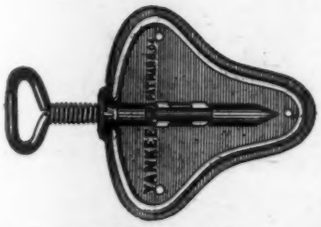
ENTERPRISE FOUNDRY & FENCE CO. 290 S. Senate Ave., Indianapolis, Ind.

STANDARD HORSE NAIL CO.
NEW BRIGHTON, PA., U.S.A.
MANUFACTURE
A Full Line of Horse Nails
Send for Catalogue, Prices & Samples.

YANKEE DAMPERS and CLIP (All Steel)



SMOKE PIPE SIZES
3 inch to 8 inch

HOT AIR PIPE SIZES
6 inch to 15 inch

Easiest to Get In or Out

Best & Cheapest Damper Made

GET OUR PRICES

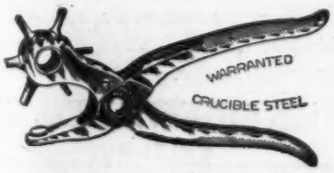
The S. M. Howes Co.

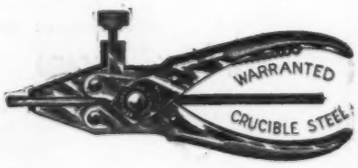
40, 42, 44, 46 Union Street, BOSTON

SAMPLE FREE

THE WM. SCHOLLHORN CO.

NEW HAVEN, CONN., U. S. A.





Manufacturers of

BERNARD'S PATENT TOOLS

Pliers, Nippers, Spring Belt and Ticket Punches, Bolt Clippers, Dividers and Hardware Specialties, under the "Bernard," "Paragon," "Elm City," "Lodi" and "Excelsior" Brands.

Write for Catalogue

BB

A SPECIAL SALE OF

Glassware, Crockery and China

¶ Those are THE lines for April pushing —in any store. House cleaning and "moving day" create new needs in those lines in every home and the Merchant will not miss such an opportunity.

¶ Glassware, Crockery and China are featured in our April catalogue.

¶ The book begins with a Special Sale of leader items as extraordinary as you'd expect from our unique facilities. And there is an exceptional plenty of Profit Payers on the regular pages.

¶ Besides the Goods—this catalogue of ours contains the Plans for the April pushing of Glassware, Crockery and China in YOUR store.

¶ Make your storekeeping fully resultful—through a Special Sale of Glassware, Crockery and China draw more people to see ALL your goods—THIS April.

¶ Don't delay. Send NOW for our April catalogue (No. MC 661). Then—PUSH the lines it pays to push in April.

BUTLER BROTHERS

Wholesalers of General Merchandise

NEW YORK CHICAGO ST. LOUIS MINNEAPOLIS

Sample Houses: BALTIMORE, DALLAS

BB

Automatic Swivel Vise

Locks Automatically by Tightening the Jaws

Saves 20 per cent Vise Labor

Send for Catalogue

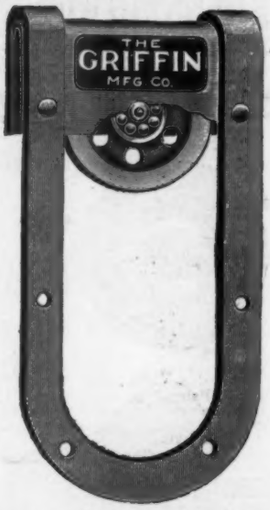
Rock Island Tool Co.

ROCK ISLAND, ILL., U.S.A.

NEW YORK 136 Liberty St. **CHICAGO** 116 Lake St.

DENVER, 208 McPhee Building

GRIFFIN'S



Improved Steel Door Hangers

Made Entirely of Steel
(wheels excepted)

These Hangers have hard steel Axles and Roller Bearings. Anti-Friction on any length of track.

Guaranteed to handle the heaviest doors satisfactorily.

Write for complete catalog of Hinges, Butts, Shelf Brackets, Door Bolts, etc.

THE GRIFFIN MFG. CO.

ERIE, PA.

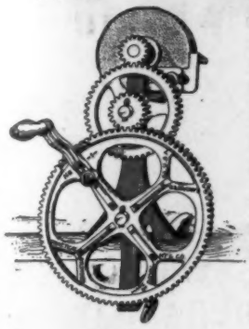
C. N. HOOPER, Dubuque, Ia.

Vitreous Enameling

TECHNOLOGIST

Designs, builds and starts new plants, improves quality and reduces the costs in those already established.

"WAY AHEAD"



Of the grindstone or any other apparatus for sharpening table or kitchen cutlery or edge tools of every kind are our

Hand and Foot Power

Grinders & Tool Sharpeners

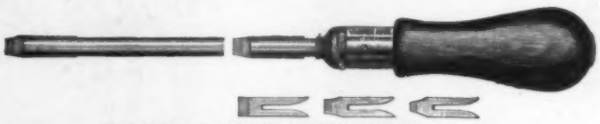
Four sizes. Needed in every home—every day in the year. Every grinder guaranteed. Be sure; Get our catalogue with Discounts to the trade—to-day.

ROYAL MANUFACTURING CO.
108 E. Walnut Street, Lancaster, Pa., U. S. A
New York, 176 Fulton Street, Herbert Porter & Co., Managers
Chicago, 113-115 Michigan St., E. G. Curtis & Son, Managers

"Yankee Tools"

New Styles—Have You Seen Them?

Are Without Equal in Quality or Efficiency in Practical Use



MAGAZINE RATCHET SCREW DRIVER, NO. 65

RATCHET DRIVER with SCREW HOLDER NOS. 110-111-115

RATCHET "SCREW EYE" DRIVER, NOS. 80 and 81

ASK YOUR JOBBER ABOUT THEM

Send for "Yankee" Tool Catalog.

North Bros. Mfg. Co., Philadelphia

Blick No. 3 The Best Box

For Rural Free Delivery

Be Just With Customers

Sell them Blick No. 3 boxes. They are big ones, 6½ x 8½ x 19 inches. Made of heavy galvanized steel. Painted green, the new government color. Same shape and color as city boxes. Have Positive-Locking Flag Signal, Automatic Latch, Watertight Quality. Every box tested, every box right, every box warranted. They will get the business. You better get them. Order now.

$5.88 per Doz.

Blick-Williams Co.
Indianapolis, Ind.

Our No. 030 Glass Cutters

SQUARE END FOR DRIVING POINTS

This is a Glazier's Tool and a point driver. Read about it in the **Green Book.**

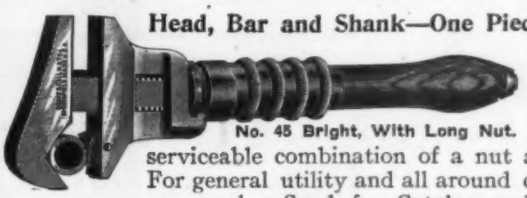
Smith & Hemenway Company

Publishers of the Green Book of Hardware.

108-110 Duane St., New York, N. Y., U. S. A.

COMBINATION PIPE AND NUT WRENCH

Head, Bar and Shank—One Piece Steel Forging.

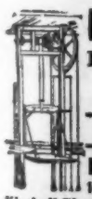


No. 45 Bright, With Long Nut.

Made from the best materials. Parts interchangeable. A strong and serviceable combination of a nut and pipe wrench. For general utility and all around convenience it has no equal. Send for Catalog and Prices.

BEMIS & CALL HARDWARE & TOOL COMPANY, SPRINGFIELD, MASS.

INTERCHANGEABLE
LOCK-CORNER SHELF BOXES
For the Hardware Trade.
THE A. H. GREEN CO.,
97-101 Warren St., NEW YORK.



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Improved Quick and Easy, Rising Steam, Electric and Hand Power.

SEND FOR CIRCULAR.

KIMBALL BROS. CO.
1031 Ninth St., COUNCIL BLUFFS, IOWA
Kimball Elevator CO., 139 Vincent St., Cleveland, O.

We Have a Hardware Delivery Wagon That You Can Depend Upon

Body 20 in. from the ground, full width; regular height wheels, and yet will turn short.

EASY TO LOAD AND UNLOAD

Durability guaranteed.
Complete catalogue on request.
Mention this paper and address in full.

SYCAMORE WAGON WORKS
109 Edwards Street. SYCAMORE, ILL.

DEAD OR SLOW MOVING STOCK?

If you have a large lump of hardware Merchandise, that you want disposed of *quickly* at a *sacrifice*, address "Quick Sales," care THE AMERICAN ARTISAN and get our proposition. It will be optional with you as to whether you are known or not known in the sale.

Iwans' Voleano Revolving Chimney Top

Sizes 6 to 12 Inches.

Sold by Jobbers of Hardware and Tinners' Supplies.

Notice one of its **Strong Features:** The upward sloping opening in back of hood creates a constant upward draft, no matter how depressing the atmosphere.

You need it for some of your customers' chimneys.

Send Postal for Catalogue.

IWAN BROTHERS
Mfrs. of Hardware Specialties
STREATOR, ILL.

UMBRELLA CLOTHES BAR

32 FEET DRYING SPACE

Handy in Laundry, Kitchen and Nursery. Handy Everywhere. Each arm one piece, kiln dried hardwood, works independently.

MARTCROSS CO., Mfrs.
40 Dearborn St., CHICAGO

"ROTARY"

The washer that is making a hit

UNEQUALED IN
STYLE, FINISH, DURABILITY or EASE of OPERATION

SOLD ON EXCLUSIVE AGENCY PLAN

Write us and let us tell you more about it

ROTARY WASHING MACHINE CO., ST. LOUIS, MO.

The White Washer

DOUBLE BALL BEARING. FLY WHEEL UNDER THE TUB. HIGHEST SPEED. EASIEST RUNNING. QUICKER REVERSE. FOOT POWER ATTACHMENT. TUB OPENS WHEN MACHINE IS IN FULL MOTION. FIVE YEARS' GUARANTEE. SOLD TO ONLY ONE DEALER IN EACH TOWN.

Ask for Exclusive Agency and Get Acquainted With

The White Way

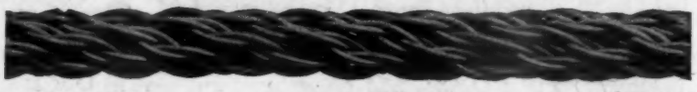
White Lily Manufacturing Co.
1500 Rockingham Road, - Davenport, Iowa

LIGHTNING RODS

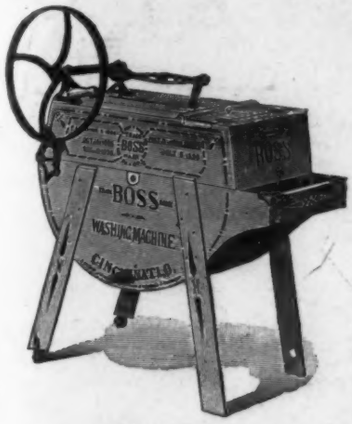
¶ Now is the time for you to get in your order for our pure copper cable. The spring storms are coming soon and you will have call for a good pure copper cable rod. We loan you one of our improved Static machines FREE, and furnish the best goods there are on the market, and our prices are right. Write today before the Agency and Territory are gone.

MAHER & SON LIGHTNING ROD CO., Preston, Ia.

ELECTRA LIGHTNING ROD CABLE AND FIXTURES



NOTHING BETTER PRICES LOWEST WRITE TODAY
ELECTRA LIGHTNING ROD CO., 220-240 Market Street, CRESCO, IA.



"BOSS" CLOTHES WASHER

Is PositivelyThe Only Satisfactory Washer On The Market

There is a reason why MORE "BOSS" WASHERS are sold each year than all the other "just as good kind" put together.

IT SELLS ITSELF ON ITS OWN MERITS AND EVERY ONE SOLD NOT ONLY STAYS SOLD AND MAKES A PLEASED CUSTOMER BUT WILL CAUSE THE SALE OF OTHERS.

THE BOSS IS ENTIRELY DIFFERENT FROM THE MANY WORTHLESS DEVICES ON THE MARKET, THAT ARE WASHING MACHINES IN NAME ONLY.

The "BOSS" is the **only washer** constructed on the principle of cleansing clothes by RUBBING and SQUEEZING—by the latter forcing the water through every fibre and removing the dirt as cannot be done by any other device. This has been acknowledged the only true and satisfactory principle for washing clothes since the early ages.

The "BOSS" washes quicker and with better results, anything from large heavy pieces to the finest fabrics, including laces and silks and is GUARANTEED to do so without least injury to such.

The "BOSS" is the only washer having a special chamber where dirt and lint accumulate when separated from clothes, preventing this matter from becoming continually stirred up and coming in contact with clothes, as is the case with other types of washers. The value of this feature can hardly be estimated. It means not only cleaner and more sanitary clothes, but less time and labor required to obtain this result. Made in three sizes for large and small families and hotels and laundries.

ORDER SAMPLES FOR YOUR STOCK AND BE PREPARED TO MEET THE DEMANDS OF YOUR CUSTOMERS.

Write for circular of our full line of
UP-TO-DATE WASHERS

THE BOSS WASHING MACHINE CO.
CINCINNATI, OHIO

The "O. K." Rotary
Has Roller-Cogs Throughout

Known the World Over for Simplicity, Strength, Durability and ease of operation.

IF WE could place an O. K. washer in your store, set it up and **show you** through a practical demonstration of washing clothes, what it will do, it would not be necessary for us to tell you anything about it as the machine would speak for itself. But while thousands of dealers know all about this faithful machine through many years of close association, yet there are many who would be greatly **benefited financially** and otherwise too, if they would give the "O. K." an equal chance with other so called "just as good kind washers," for it would not take them long to be convinced that there is but one **"O. K."** Rotary, and that its name implies just what it is, simply **"O. K."** nothing more, nothing less.

Your correspondence solicited.

H. F. BRAMMER MFG. CO. DAVENPORT, IOWA.

APR 7 1908
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Agate
NICKEL-STEEL
Ware

AGATE L&G Mfg. Co. NICKEL-STEEL WARE

is absolutely free from poisonous substance, is made by careful, experienced men, by a company founded in 1850. The first enameled ware and blue and white ware made in this country was made in our mills. We know how to make enameled ware safe and durable. We make it safe and durable because we are proud of the trade mark. Look for the blue label.

Lalance & Grosjean Mfg. Co.

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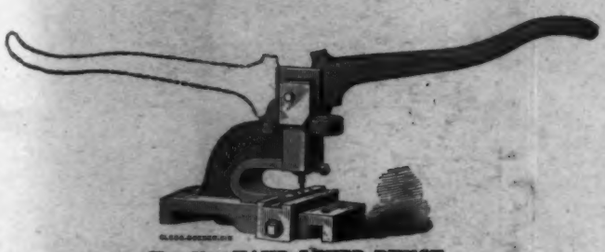
CORNICE BRAKE

No. 59. HAND LEVER SHEARS
Will cut No. 16 Gauge material, a swath of 3¼-inch.
Weight, 20 pounds.

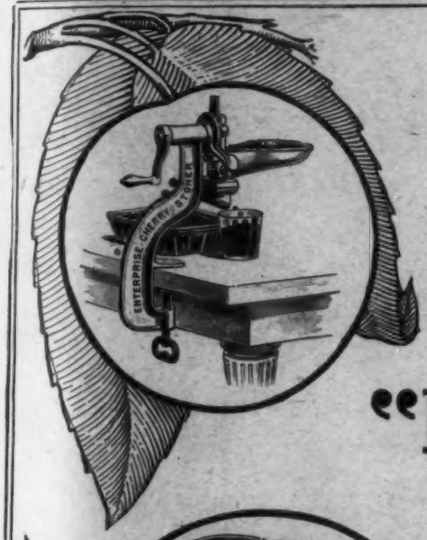


No. 61. HAND LEVER PUNCH
Will punch $\frac{3}{16}$-inch holes in ⅛-inch iron.

The J. M. Robinson Mfg. Co.
3282 to 3288 Spring Grove Avenue
CINCINNATI, O., U. S. A.

As the wind is to the sails, so is advertising to the sales.

An ad in THE AMERICAN ARTISAN will bring sales.



When "Cherries are Ripe"

and women are busy at their preserving kettles, you'll gain their approval—a good thing—and their trade—better still—if you can supply them promptly with an

"ENTERPRISE"
Cherry Stoner

Cherry season is short. Wise dealers have the **"Enterprise" Cherry Stoner** on their shelves in time. When a woman has her cherries ready for stoning she won't wait 'till you order it. She won't wait, either, for an **"Enterprise" Fruit Press.** When she wants it she wants it quick! She will go somewhere else if you haven't it. *Stir up the jobber.* Write to-day for our latest catalog.

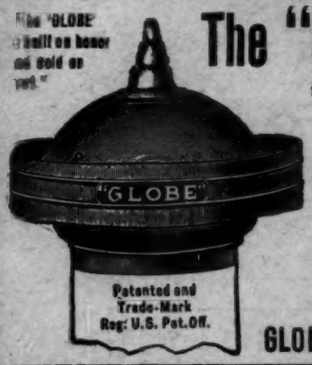
The Enterprise Mfg. Co. of Pa,
Philadelphia, U. S. A.
21 Murray St., New York 438 Market St., San Francisco

THE IMPROVED ONE-PIECE MITER

This miter is made absolutely correct, true to shape, size, and bead, and the easiest connecting slip joint. Will save your time and temper. In case your supply house cannot furnish them, send your order direct to the

J. E. WHITACRE MFG. CO.
ROCKFORD, ILL.
Manufacturers of Sheet Metal Specialties.

"The 'GLOBE' is built on honor and sold on merit."



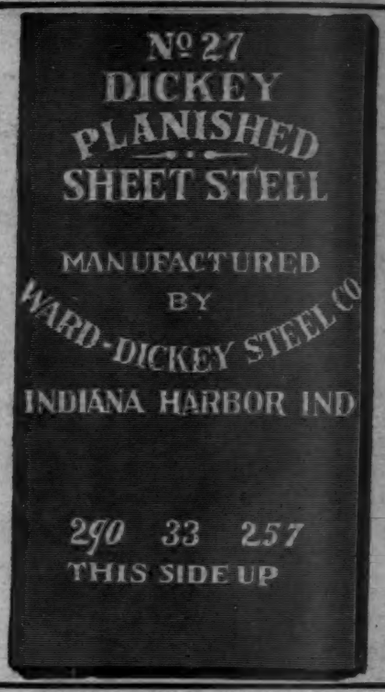
The "GLOBE" Ventilator

in COPPER, GALVANIZED IRON and with Glass Tops for Skylight purposes.

ABSOLUTELY STORM PROOF

For Perfectly Ventilating Schools, Churches, Halls, Mills, Factory and Audience Rooms of Every Character

SMOKY CHIMNEYS CURED
"GLOBE VENTILATED RIDGING"
Send for Pamphlet.
MANUFACTURED BY
GLOBE VENTILATOR CO., Troy, N. Y.



NEVER BREAKS

The following extract was taken from the correspondence of one of the largest users in the United States.

"We had a Cylinder Stove of Russia iron and another of your steel set up on our show room floors three years ago to **test its wearing properties under long heat.** Both have had constant fires burning in them, winters, both frequently red hot. The preference in appearance is with the steel. It works like copper; **Never breaks.**"

Quotations gladly made upon specifications. Circular upon request.

We make all kinds of Tin Cans, Decorated Cans and Sheet Iron Cans. If you are interested in anything in this line please WRITE

PEORIA CAN COMPANY, Peoria, Ill.

ALWAYS SOMETHING SALABLE

WE MAKE A SPLENDID LINE OF

Pudding Pans, Pie Pans, Dish Pans

Many kinds of pans. Good flat-bottom ones, pans that hold their shapes.

We make them in the best plates. They are smooth pressed, many are retinned. They are durable.

ALSO OVER 500 OTHER FAST SELLING ITEMS

Star ★ Enameling & Stamping Co., PITTSBURGH, PA.

This Space for Sale.
Inquire of Daniel Stern,
69 Dearborn St., Chicago

FOLLANSBEE BROS. CO.'S

HAMMERED OPEN HEARTH ROOFING TIN

Made in exact accordance with the methods advised in the article on "Tin Plate" now running in the Master Sheet Metal Worker's Journal.

HAMMERED OPEN HEARTH Base Exclusively, any Weight of Coating Desired

FOLLANSBEE BROTHERS CO.
PITTSBURGH

Makers of

BRIGHT AND ROOFING TINPLATE and SHEET STEEL

STAR EXPANSION BOLTS.

ALL KINDS

WE MAKE EXPANSION PARTS TO FIT THE BOLTS AND SCREWS YOU HAVE IN STOCK

ANYTHING TO FIT FROM THE SMALLEST WOOD SCREW TO THE LARGEST LAG OR MACHINE

Samples and Catalog on Request
STAR EXPANSION BOLT CO.
BAYONNE, N. J.

Eastlake Metal Shingles

The Roofing with a Reputation

Have been on buildings *twenty* years, and are still in good condition.

Write for Catalogue and Prices

The W. J. BURTON CO.
DETROIT, MICH.

THE "CENTENNIAL"

RAIN-WATER CUT-OFF

The strongest, most durable and cheapest CUT-OFF on the market.

The only single cut off made to fit Corrugated and plain pipe and which can be used without extra pipe or elbows. For sale by all leading jobbers.

Manufactured only by
The Sullivan-Geiger Co.
19 and 21 East South Street, Indianapolis, Ind.